Department Application

Bronze and Silver Award

ATHENA SWAN BRONZE DEPARTMENT AWARDS

Recognise that in addition to institution-wide policies, the department is working to promote gender equality and to identify and address challenges particular to the department and discipline.

ATHENA SWAN SILVER DEPARTMENT AWARDS

In addition to the future planning required for Bronze department recognition, Silver department awards recognise that the department has taken action in response to previously identified challenges and can demonstrate the impact of the actions implemented.

Note: Not all institutions use the term 'department'. There are many equivalent academic groupings with different names, sizes and compositions. The definition of a 'department' can be found in the Athena SWAN awards handbook.

COMPLETING THE FORM

DO NOT ATTEMPT TO COMPLETE THIS APPLICATION FORM WITHOUT READING THE ATHENA SWAN AWARDS HANDBOOK.

This form should be used for applications for Bronze and Silver department awards.

You should complete each section of the application applicable to the award level you are applying for.

> Additional areas for Silver applications are highlighted throughout the form: 5.2, 5.4, 5.5(iv)

If you need to insert a landscape page in your application, please copy and paste the template page at the end of the document, as per the instructions on that page. Please do not insert any section breaks as to do so will disrupt the page numbers.

WORD COUNT

The overall word limit for applications are shown in the following table.

There are no specific word limits for the individual sections and you may distribute words over each of the sections as appropriate. At the end of every section, please state how many words you have used in that section.

We have provided the following recommendations as a guide.

From: [redacted]
To:
Cc:
Subject: RE: Heriot-Watt University, School of Engineering & Physical Sciences - Request for additional word count
Date: 28 February 2020 18:37:47
Attachments: image002.png

Dear Loraine,

We are happy to grant an additional 1000 words to The School of Engineering and Physical Sciences for their April 2020 submission due to their faculty-like submission. The additional words are to allow the School to analyse and reflect on any subject or discipline-specific differences, and to demonstrate how Athena SWAN principles are embedded in each constituent programme and unit.

Please include this email in your submission as confirmation and state in the submission where the additional words have been used.

Hope this helps,
Tamara

Tamara Szucs
Athena SWAN Programme Adviser
E [redacted]

Please note: I work part-time (usually Tue to Thu) and flexibly (so may email at 'odd' hours – no pressure for a reply outside of your working hours).

www.advance-he.ac.uk
First floor, Napier House
24 High Holborn, London, WC1V 6AZ

AdvanceHE

From: [redacted]
Sent: 28 February 2020 13:46
To: [redacted]
Cc:
Subject: Heriot-Watt University, School of Engineering & Physical Sciences - Request for additional word count

To whom it may concern,

The School of Engineering & Physical Sciences, Heriot-Watt University has registered our intention to submit our Athena SWAN bronze departmental application at the end of April 2020. We would now like to submit a request for the full additional word count. Please see below details to support this request.

Department application	Bronze	Words used
Word limit	**10,500**	**11,689** (inc. 1000 additional words+covid-19)
Recommended word count		
1.Letter of endorsement	500	592
2.Description of the department	500	418
3. Self-assessment process	1,000	1328
4. Picture of the department	2,000	2646
5. Supporting and advancing women's careers	6,000	6191
6. Further information	500	514
7. Action Plan		

Abbreviations	
AY	Academic Year (used for student headcounts
CDC	EPS Career Development Committee. Formed to deliver Bronze Action Plan 2014-2017.
CE	Chemical Engineering Teaching subject
Chem	Chemistry Teaching subject
CRS	Contract Research Staff. Staff normally Research Associates employed on research grants for a fixed term.
CS	Combined Studies (Teaching subject
CY	Calendar year (used for staff headcounts
DoA	Director of Administration
DLT	Director of Learning and Teaching (Executive role
DoPGR	Director of Postgraduate Research Operational role
DoPGT	Director of Postgraduate Teaching Operational role
EO D	Equal Opportunities and Diversity
EECE	Electrical, Electronic and Computer Engineering Teaching subject
EFD	Enhanced First Degree
EPS	School of Engineering and Physical Sciences
GPC	Good Practice Checklist
HoRI	Head of Research Institute Line Manager

HoS	Head of School
HWU	Heriot-Watt University
IB3	Institute of Biological Chemistry, Biophysics and Bioengineering
ICS	Institute of Chemical Sciences
IMPEE	Institute of Mechanical, Process and Energy Engineering
IPaQS	Institute of Photonics and Quantum Sciences
ISSS	Institute of Signals, Sensors and Systems
ME	Mechanical Engineering Teaching subject
PDR	Performance and Development Review
PGR	Postgraduate Research
PGRCG	Postgraduate Research Co-Ordinators Group
PGT	Postgraduate Taught
Phys	Physics Teaching subject
PS	Professional services, covers technical and administrative staff and also 3 formerly academic-related specialist staff
R-only	Academic staff (usually on a fixed-term contract engaged to carry out research
RA	Research Associate, normally a member of CRS see above .
SAT	School of Engineering & Physical Sciences Self-Assessment Team
SMG	School of Engineering & Physical Sciences Senior Management Group
T&R	Academic staff on a non-fixed term teaching and research contract (majority
SPD	Senior Programme Director UG Teaching (Operational Manager)
T&S	Academic staff on a non-fixed term teaching and scholarship contract (minority
UG	Undergraduate
WES	Women's Engineering Society
WISE	Women in Science and Engineering

Name of institution	Heriot-Watt University	
Department	School of Engineering & Physical Sciences	
Focus of department	**STEMM**	**AHSSBL**
Date of application	20/05/2020	
Award Level	**Bronze**	
Institution Athena SWAN award	**Date:** **November 2016 - Bronze**	**Level:**
Contact for application Must be based in the department	Professor Bob Reuben	
Email	R.Reuben@hw.ac.uk	
Telephone	[redacted]	
Departmental website	https://www.hw.ac.uk/uk/schools/engineering-physical-sciences.htm	

1. LETTER OF ENDORSEMENT FROM THE HEAD OF DEPARTMENT

Recommended word count: Bronze: 500 words | Silver: 500 words

An accompanying letter of endorsement from the head of department should be included. If the head of department is soon to be succeeded, or has recently taken up the post, applicants should include an additional short statement from the incoming head.

Note: Please insert the endorsement letter **immediately after** this cover page.

Professor Stephen McLaughlin, FREng FIEEE FRSE CEng
Head of School

Tel: +44 131 451 4127
Fax: +44 131 451 3136
Email: *s.mclaughlin@hw.ac.uk*

Throughout my career in academe, I have been aware of the challenges encountered by women studying and working in environments where they are under-represented. Since becoming Head of School in 2011 and also as the proud father to a daughter working as a software engineer in industry this awareness is more acute. I am committed to lead a School that supports all staff and students. Working with my Senior Management Group, we explicitly express our determination to address and challenge any barriers that arise. I attest that the qualitative and quantitative information in the following submission is an honest, accurate and true representation of the School of Engineering and Physical Sciences.

Our SAT is always chaired by a member of SMG and Athena SWAN is a standing item at each meeting of the Group. Membership of our SAT is actively encouraged by Senior Managers and is explicitly recognized in workloads as a collegial contribution to the School.

We were disappointed that our submission for a Silver Award in November 2018 was unsuccessful and we are applying for a renewal of our Bronze Charter Mark pending an improvement in our data systems and procedures, which I will pursue as Chair of the University's Athena SWAN Champions Group supporting best practice sharing and identifying University-wide themes and will be instrumental in our institutional submission in November 2020. Through this, and as Project Lead in the University's Enterprise Resource Planning initiative, I am confident that we will have a robust platform for our next submission.

Since 2015 our focus has been on lasting culture change: the representation of women in academic roles across the School has increased, as has the proportion in senior University roles. We have seen positive progress in the pipeline distribution of our T&R staff Figure 27 and begun to tackle slow career progression for women in Teaching and Scholarship roles. At the most senior level, I am delighted by the promotions of Professor Mercedes Maroto-Valer to University Assistant Deputy Principal (Research & Innovation ; Professor Vicki Stone to Head of Research Institute/Management Group member; the promotion to Professor of Dr Gillian Thomson, our Director of Learning and Teaching; her further advancement to a concurrent role of University Assistant Deputy Principal with a focus on Widening Access. At the most junior level, I am gratified that our summer bursary scheme and our engagement with the University's Fellowship College have galvanized early career researchers. Our influence beyond the School is seen in the adoption across the University of interventions 1) establishment of transparent start-up packages and 2) a maternity checklist for managers.

There are two major areas of concern highlighted by our data 1) attracting a higher proportion of applications from women to academic posts and 2) below national average representation of women in some undergraduate programmes and some postgraduate research areas. I have committed £5k over 2 years to develop high-quality professionally designed *Further Particulars* for all of our advertisements to appeal to a more diverse group of applicants. The School Management Group has committed £5k annually to the SAT to invite speakers to supplement our seminar programme. In a period of growth of our core group of non-fixed term T R academic staff, our percentage of women has grown from 10% to 15% but we recognize the need for this group to grow to reflect our overall percentage of women in the School (24% .

I hope that our submission shows that we are already seeing many impacts of our initiatives and I look forward confidently to our next application for a Silver Award.

Yours faithfully

Professor Stephen McLaughlin, FREng FIEEE FRSE CEng,

Word Count: 592

2. DESCRIPTION OF THE DEPARTMENT

Recommended word count: Bronze: 500 words | Silver: 500 words

Please provide a brief description of the department including any relevant contextual information. Present data on the total number of academic staff, professional and support staff and students by gender.

The School of Engineering and Physical Sciences is one of the five schools that make up Heriot-Watt University. The School has autonomy over its budget, appointments, research strategy and teaching. It has a dedicated administration team embedded in the School and an HR partner directly linked to the School.

The School is organised into 5 research institutes:

- Biological Chemistry, Biophysics and Bioengineering (IB3)
- Chemical Sciences (ICS)
- Mechanical, Process and Energy Engineering (IMPEE)
- Photonics and Quantum Sciences (IPaQS)
- Sensors, Signals and Systems (ISSS)

Teaching is managed within a matrix framework of 5 subject areas under the leadership of Professor Gillian Thomson, Director of Learning and Teaching. Our teaching disciplines are:

- Chemistry (Chem)
- Chemical Engineering (CE)
- Electrical, Electronic and Computer Engineering (EECE)
- Mechanical Engineering (ME)
- Physics (Phys)
- Brewing and Distilling (B&D)

At our UK campus in Edinburgh, the School occupies six contiguous buildings with 4 staff common rooms. It is the working environment for 280 academic and research staff (23% F) and 97 Professional Services (PS) staff (45% F). Research is organised along interdisciplinary research institute lines, whereas teaching is organised along subject lines, so most academic staff have two communities.

The School offers 72 UG and 18 PGT degree programmes in Edinburgh, as well as PGR degrees in all subject areas. We host 1,964 first degree students (21% F), 223 PGT students (33% F) and 387 PGR students (22% F). Table 1 summarises the numbers and gender balance of the members of the School in the 2018/19 Academic Year.

Table 1 Members of the School by Position (Staff Headcounts; Students FTEs), 2019

	Female	Male	Total	% Female
Academic, Teaching & Research Staff	19	116	135	14
Academic, Teaching & Scholarship Staff	7	17	24	29
Research Only Staff (CRS)	37	84	121	31
Professional Services Staff	44	53	97	45
Postgraduate Research Students	87	297	387	22
Postgraduate Taught Students	74	149	223	33
Undergraduate Students	416	1530	1964	21
Overall	675	2154	2829	24

Line management of our Teaching & Research (T&R) academic staff (135, 14% F) is delivered by the appropriate Head of Institute. For our Contract Research Staff (CRS) (121, 31% F), their line manager is the principal investigator for the research contract on which they are employed. We have a number of Teaching & Scholarship (T&S) academic staff (24, 29% F), who are directly managed by the Director of Learning and Teaching. Professional Services are organised at School level and led by the Director of Administration. Structurally, the teams reflect the different functions they deliver e.g. Management, Teaching, Research and Technical support. The 97 PS staff are managed according to their function.

The School delivers teaching and research at its overseas campuses in Dubai (17 School academic staff members) and Malaysia (17 School academic staff members). This submission considers only students and staff based in the UK, although our good practice is delivered across the School, regardless of geographical location and we have nascent SAT groups in both Malaysia and Dubai.

Word Count: 418

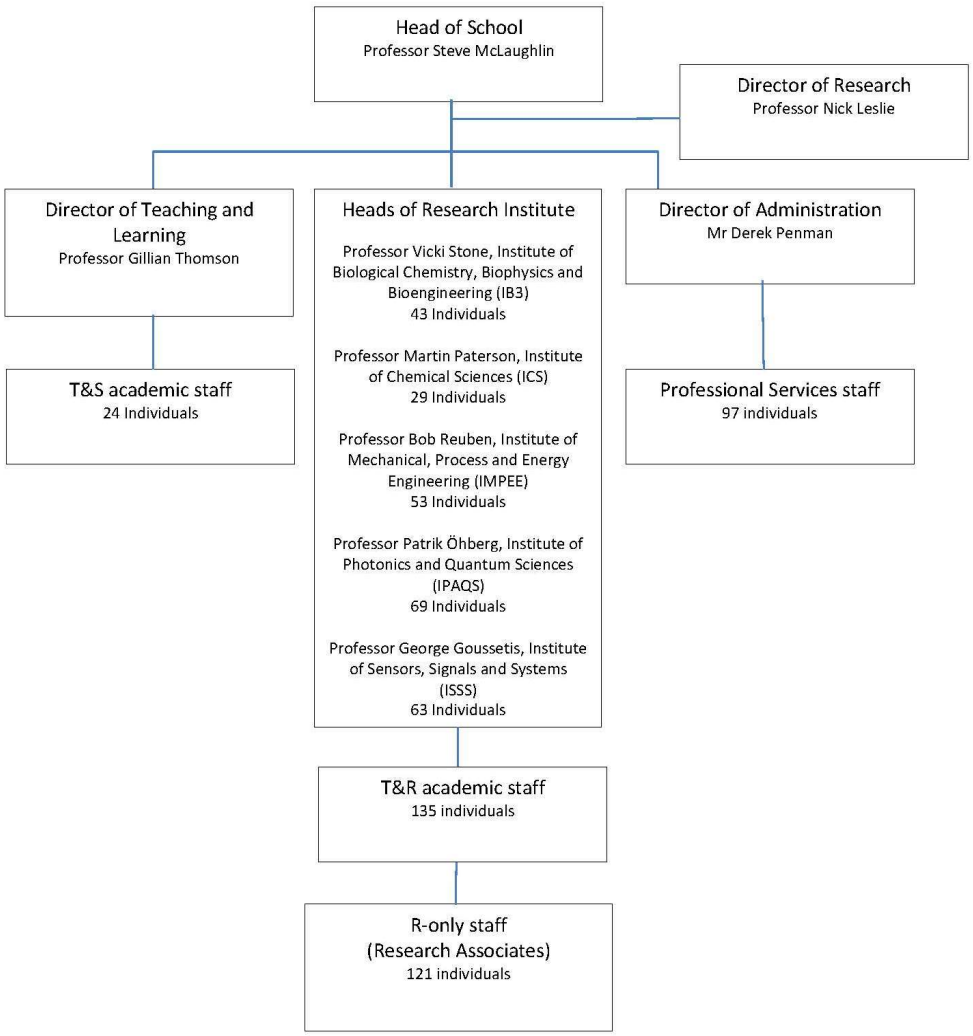


Figure 1 Management Diagram for School of Engineering & Physical Sciences (headcounts for 2018/19, role-holders as at January 2020)

3. THE SELF-ASSESSMENT PROCESS

Recommended word count: Bronze: 1000 words | Silver: 1000 words

Describe the self-assessment process. This should include:

(i) a description of the self-assessment team

Our SAT was established in November 2017 to reflect the diverse teaching and research interests of academic staff and to include professional services colleagues as well as student and contract research staff representation. Consideration was also given to achieving gender balance and ethnic diversity. The membership was last refreshed in 2019 to bring in a co-Chair, Professor Patrik Öhberg, who will carry forward the Bronze Action Plan from May 2020, at which point Professor Bob Reuben will demit. The SAT Chair is always a member of the School's SMG and the membership reflects experience of key processes e.g. promotion, mentoring, development, and recruitment. All line managers explicitly recognise the contributions of members of the

SAT as part of their workload and the SAT Chair reports to the SMG at every meeting. A list of current SAT members is contained in

Table 2, including representatives of our nascent groups in Dubai and Malaysia.

In order to emphasise our determination to "Make a difference", each member of the SAT belongs to one or more Working Group, chosen to engage directly with our staff and students (Figure 5).

Table 2 Members of the SAT by Position and Role

Name	Position in School	Discipline (where academic)	Role on SAT
Professor Bob Reuben	Professor of Mechanical Engineering and Head of IMPEE	Mechanical Engineering	Management liaison
Professor Patrik Öhberg	Professor of Physics and Head of IPaQS	Physics	Management liaison and Co-ordinator: Consultation WG
Dr Anne Bernassau	Assistant Professor, ISSS	EECE	Consultation WG
Dr Lydia Campbell	Associate Professor, IMPEE	Biology	Consultation WG
Maureen Franks	PS: Institute Administrator, IB3	PS	Consultation WG
Dr Wesam Gamal	Research Associate, IMPEE	Mechanical Engineering	Consultation WG
Dr Helinor Johnston	Associate Professor, IB3	Biology	Consultation WG
Dr Yeaw-Chu Lee	Assistant Professor, IMPEE	Mechanical Engineering	Consultation WG
Dr Mehul Malik	Assistant Professor, IPaQS	Physics	Consultation WG
Dr Farnaz Mohsenpour	Assistant Professor, T&S	Chemical Engineering	Consultation WG
Dr Georgina Rosair	PS: Experimental Officer	Chemistry	Consultation WG
Professor Raffaella Ocone	Professor of Chemical Engineering, IMPEE	Chemical Engineering	Consultation WG and WES link
Dr Leah Powell	Research Associate, IB3	Biology	Consultation WG
Colette Bush	PS: Centre for Doctoral Training, IPaQS	PS	Consultation WG, Comms. & Pub. WG, WISE link
Loraine Cameron	PS: EPS HR Officer	PS	Co-ordinator: Comms. & Pub. WG
Dr Xianwen Kong	Assistant Professor, IMPEE	Mechanical Engineering	Co-ordinator: Data and Analysis WG
Dr Ali Ozel	Assistant Professor, IMPEE	Chemical Engineering	Data and Analysis WG
Dr Stephen Mansell	Assistant Professor, ICS	Chemistry	Co-ordinator: Student Interface WG
[redacted]	PhD Student, ISSS	Electrical Engineering	Student Interface WG
[redacted]	Undergraduate Student	Chemical Engineering	Student Interface WG
Dr Heba Shoukry	Assistant Professor, ISSS	EECE	Student Interface WG
Dr Ruaraidh McIntosh	Assistant Professor, ICS	Chemistry	Mentoring advisor
Dr Yun Ii Go	*Assistant Professor, IPaQS*	*EECE*	*Dubai*
Dr Rebecca Lim	*Assistant Professor, IMPEE*	*Chemical Engineering*	*Dubai*
Ms Rula Sharqi	*Assistant Professor, School*	*Mechanical Engineering*	*Dubai*
Dr Ayman Hermansson	*Assistant Professor, School*	*Chemical Engineering*	*Malaysia*
Dr Irdawaty Nurmala	*Assistant Professor, ISSS*	*EECE*	*Malaysia*

Our **Consultation WG** has the **challenge** of interacting with the huge diversity of our staff in function (T&R, T&S, R, PS), teaching subject (Chemistry, CE, EECE, ME, Physics, Biology) and research theme (ICS, IB3, IMPEE, IPaQS, ISSS). This Group carries out focus group discussions and consults on/monitors matters of concern/action and is our main source of feedback to the School Management Group.

Our **Student Interface WG** has the **challenge** of interacting with some 2500 (transient) individuals of similar diversity to our staff in terms of level (UG, PGT, PGR), teaching subject (Chemistry, CE, EECE, ME, Physics, CS, B&D) and (for PGR) research theme (ICS, IB3, IMPEE, IPaQS, ISSS). To help with this, the SAT has one undergraduate (Figure 2) and one PGR representative (Figure 3) each of whom has an underlying network from whom future representatives can be chosen.

Dr Heba Shoukry recently completed her PhD in ISSS and was appointed as an Assistant Professor with responsibility for the EECE Graduate Apprenticeship scheme. Pangiota Kontou is a PhD student in ISSS.

Both are members of the SAT, Heba helping to foster the School-wide network for PGR students and Pangiota acting as student representative of that network.

Figure 3: Dr Heba Shoukry, Assistant Professor ISSS and Pangiota Kontou, PhD student ISSS. Both are members of the SAT with responsibility for the PGR student interface

These challenges suggest that we need the SAT to act as a communication hub, as detailed in Action C1.

We have identified a lack of clarity when it comes to communicating the School's support for equality and diversity. Our Communications and Publicity WG will therefore articulate more clearly and coherently the School's support, at all levels, for equality and diversity. The WG gathers and disseminates news, maintains a catalogue of examples and stories and elicits and maintains a library of annotated images. This is detailed in Action C6.

Extracting and processing numerical and qualitative data in order to allow us to monitor the effects of our actions is a challenge. Our Data and Analysis WG (DAWG) addresses this. It also maintains the records we require for our Annual Review. This is detailed in Action MO1.

Figure 4 illustrates how the SAT is linked to our main committees (Table 34). Athena SWAN is a standing item on the SMG agenda and on all of the Research Institute Committees. In addition, we hold regular quarterly meetings with the School's senior managers (Figure 1) to provide a more detailed update on our progress.

Figure 4 Organisational diagram for operation of SAT between main committees of the School (see Table 34)

Figure 5 EPS Athena SWAN SAT poster at February 2020 to be updated in June 2020

(ii) An account of the self-assessment process

Our Career Development Committee was formed to pursue our 2014-2018 Bronze Action Plan and made significant progress against the then-identified challenges. Our University systems were unable to provide comprehensive annual monitoring data, however, with the consequence that the SAT, established in November 2017, carried out the assessment retrospectively on four years' data but we were not able to show convincing progress against the 2014-18 challenges. We have re-assessed our challenges in the light of a review of the 2014-18 data for this Bronze submission.

The self-assessment utilised the following data sources:

- **Numerical data from corporate sources (plus local numerical data where required)**

  Data were provided by the university, a minimum of 3 years for each dataset where possible. In most cases, staff data is for a census year at 31 December. Student data is per academic year. Student benchmarks referred to are from the HESA Student Database and values are headcounts of students who spend at least half their time reading a specific subject. Staff benchmarks are from the HESA Staff database

- **Good Practice Checklist**

  This 90 point checklist, available from Oxford Research and Policy, allows benchmarking against good practice in gender equality in academia. As well as narrative descriptors of practice, the GPC allows for a "grading" of each element of good practice e.g. organisation/management development, career transitions, career development, School culture, and sustainability (flexibility and working practices). The assessed grades were iterated between the SAT and the SMG, focusing on those areas (Grades D and E) where most improvement is needed. The results have informed our action plan, particularly in those areas where better monitoring and/or consistency is required.

- **2018 staff survey**

  We ran our initial Athena SWAN staff survey in 2014. A second staff survey, run in August/September 2018 allowed us to assess how staff perceptions on a number of issues have changed since 2014. Response rates for the 2018 survey were: 56% for female academic staff (T&R, T&S and R) and 77% for female PS staff. Amongst academic staff, the response rates were significantly higher for female T&R and T&S staff, at 80% and 100%, respectively. Response rates in all categories were generally higher for female staff than for male staff. We used the 2014 survey to identify priority areas for our previous action plan, and have used a comparison of the 2014 and 2018 surveys to assess staff perception of our progress in the key areas of communication, development, flexibility, recruitment and promotion/advancement. The University ran a staff survey in late 2019, and this will be supplemented by a School surveys in future years.

- **Focus groups**

  A first set of focus groups were run in 2017-18 based on issues identified previously in the 2014 survey, and were designed to identify current perceptions. Focus groups were facilitated by members of the SAT free from managerial conflicts of interest, and the resulting reports were anonymised before sharing findings. Particular attention was paid to CRS in the focus group discussions with a view to understanding how best to include this staff category in the action plan delivery. We have evolved this process into our Consultation Working Group which, starting in 2019, has used our comparison of the 2014 and 2018 staff surveys, along with the findings of our GPCL to improve the communication between staff and management about the issues and challenges remaining.

The SAT meets approximately monthly and reports in detail to the SMG, meetings of which also take place monthly. Athena SWAN is also on the agenda at all the Research Institute and T&L meetings. Action planning is continuously carried out by liaising with stakeholders and the new action plan has been agreed by the SAT and formally endorsed by SMG.

(iii) Plans for the future of the self-assessment team

Upon submission of this document, the SAT will organise, along with SMG, an extraordinary plenary meeting of all staff of the School to outline the contents of the action plan and how it will be delivered. Thereafter, the SAT will meet at least three times per year and will produce an Annual Report for SMG with recommendations as part of ***Action MO1***. The resulting, endorsed report will be issued as a bulletin to the School, see ***Action C6***.

The embedded structure of the SAT will be a permanent feature of our management and organisational practice with regular rolling refreshment as part of the annual review to help ensure we meet Athena representation requirements.

Word Count: 1328

4. A PICTURE OF THE DEPARTMENT

Recommended word count: Bronze: 2000 words | Silver: 2000 words

4.1. Student data

If courses in the categories below do not exist, please enter n/a.

(i) Numbers of men and women on access or foundation courses – **N/A**

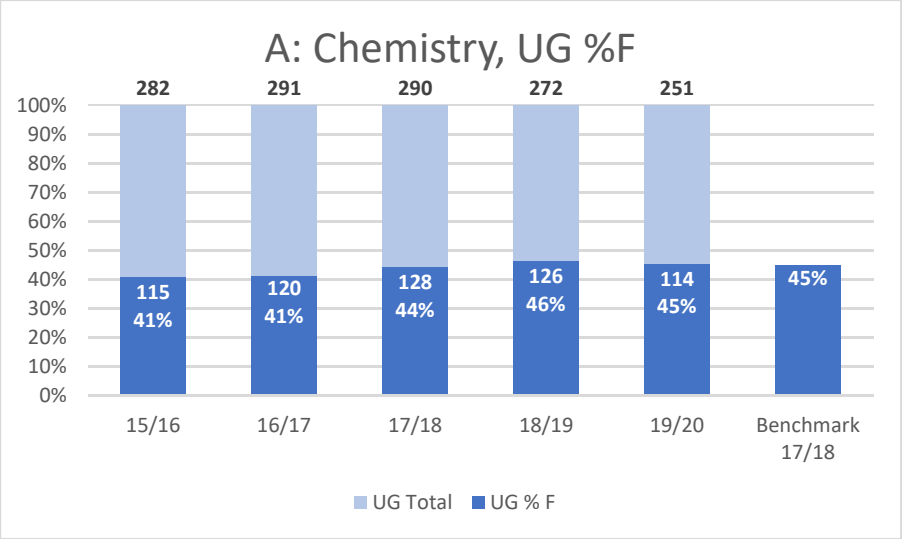
(ii) Numbers of undergraduate students by gender

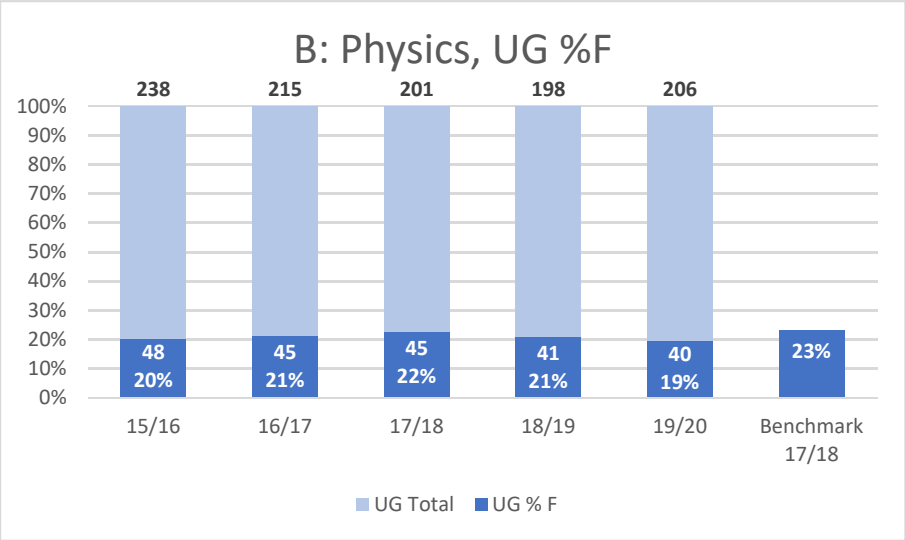
Full- and part-time by programme. Provide data on course applications, offers, and acceptance rates, and degree attainment by gender.

Table 3 shows our total UG **student population** for the five academic years to 2019/20 over our five subject areas plus combined studies. Our numbers of part-time undergraduates are currently very small, and can change dramatically year-by-year, so aggregated data only is shown in Table 3. Figure 6 A-F shows the numbers and percentages for our UG populations broken down by subject compared to the 2017/18 HESA benchmark.

Table 3 Total number (and percentages) of Full Time and Part Time Students on Undergraduate Courses

Year	Gender	Mode of Study		Total	Proportion Part Time
		Full Time	Part Time		
2015/16	Female	376 (22%)	5 (11%)	**381 (22%)**	1.3%
	Male	1296 (78%)	40 (89%)	1336 (78%)	3.0%
	Total			**1717**	
2016/17	Female	400 (23%)	0	**400 (23%)**	0.0%
	Male	1353 (77%)	12 (100%)	1365 (77%)	0.9%
	Total			**1765**	
2017/18	Female	416 (23%)	8 (28%)	**424 (23%)**	1.9%
	Male	1381 (77%)	21 (72%)	1402 (77%)	1.5%
	Total			**1826**	
2018/19	Female	[redacted] (22%)	[redacted] (10%)	[redacted] **(22%)**	0.9%
	Male	[redacted] (78%)	[redacted] (90%)	[redacted] (78%)	2.4%
	Total			[redacted]	
2019/20	Female	[redacted] (21%)	[redacted] (29%)	[redacted] **(21%)**	1.0%
	Male	[redacted] (79%)	[redacted] (71%)	[redacted] (79%)	0.7%
	Unknown	[redacted]			
	Total			[redacted]	





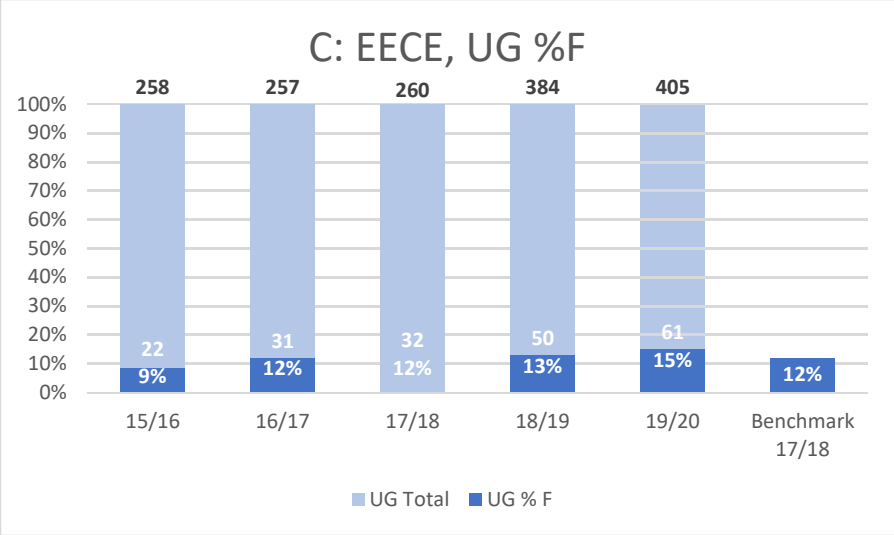
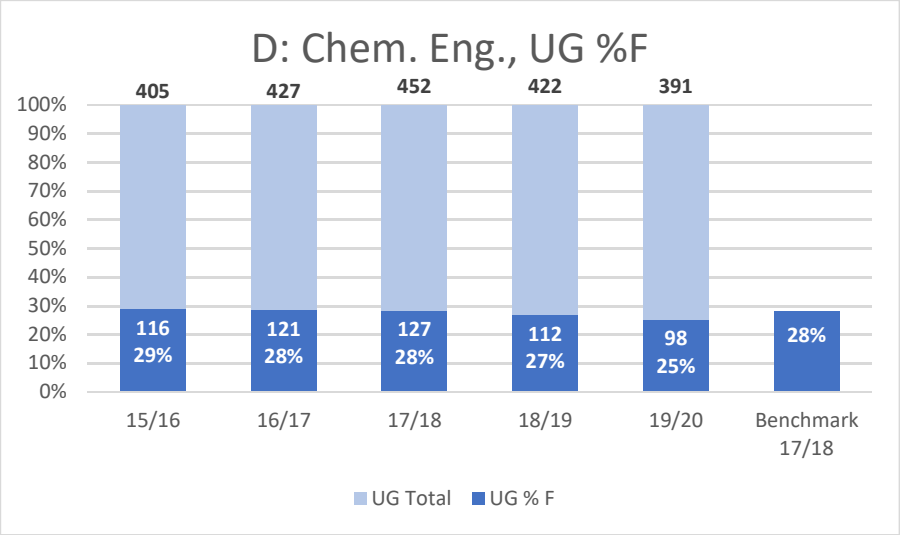
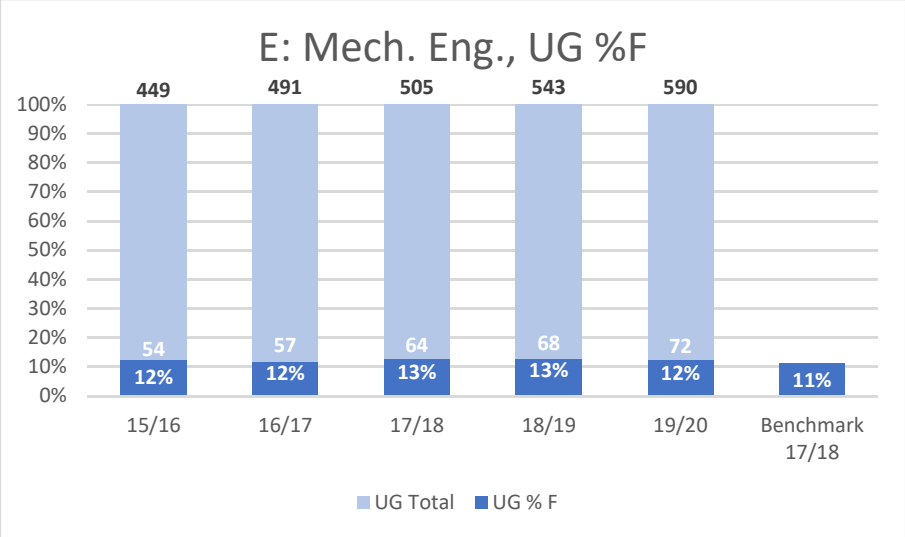


Figure 6 Numbers and percentages of female UG students by subject.





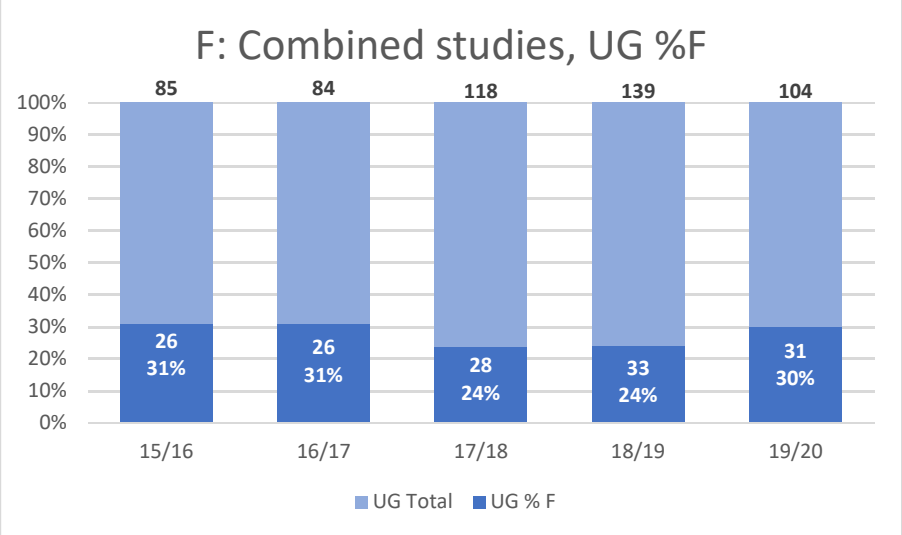


Figure 6 continued.

The UG populations have generally grown in the last 5 years, although, in all of our subjects, except EECE (258 to 405) and ME (449 to 590) overall numbers have dropped in the last 2 years, reflecting a nationally challenging recruitment environment in STEM subjects generally. Over this period, the percentage of female students has remained relatively constant (with fluctuations of a few percent) in all of our subjects, except in EECE where it has risen dramatically from 9% (22 women) to 15% (61 women). All of our subjects have remained close to the benchmark. The main issues for investigation are:

- Physics is consistently below the benchmark of 23%, most dramatically in 2019/20, 19% (40 women).
- There is potentially some good practice in EECE from which the rest of the School could learn.
- CE has now dipped below the national benchmark of 28% (from 29%, 116 women, to 25%, 98 women).
- The % female in CS varies substantially year-on-year. This is a disparate collection of students, but is our most flexible entry point with some opportunities for development.

Figure 7 A - F shows the total numbers and percentage of women passing through our undergraduate recruitment process in the last three years. The most important issue is the large drops in the numbers of applications in most of our subjects, most dramatically in CE (-417, -55%) and ME (-371, -37%), our two largest cohorts. Despite this, the percentages of women applying and being made offers remains reasonably constant and in proportion to our existing populations. This leads to two fundamental recruitment issues affecting all of our subjects:

- All of our subjects are in stasis with percentages of women applicants essentially the same as our existing populations
- The percentage of women taking up places (compared with those being made offers) varies considerably between our subjects, e.g. in 2019/20 from 26% (73) to 19% (10) in CE, compared with from 46% (138) to 49% (26) in Chem.

We acknowledge the challenge we have in recruiting female students. In order to address this shortcoming we will share good practice across our subjects and intensify (and monitor the effects of) our outreach and recruitment processes to encourage applications from females and their subsequent conversion to undergraduates. We will aim towards a minimum ratio of 1.1 times the 5-year national average for each of our subjects at every recruitment cycle. This is detailed in ***Action P3*.**

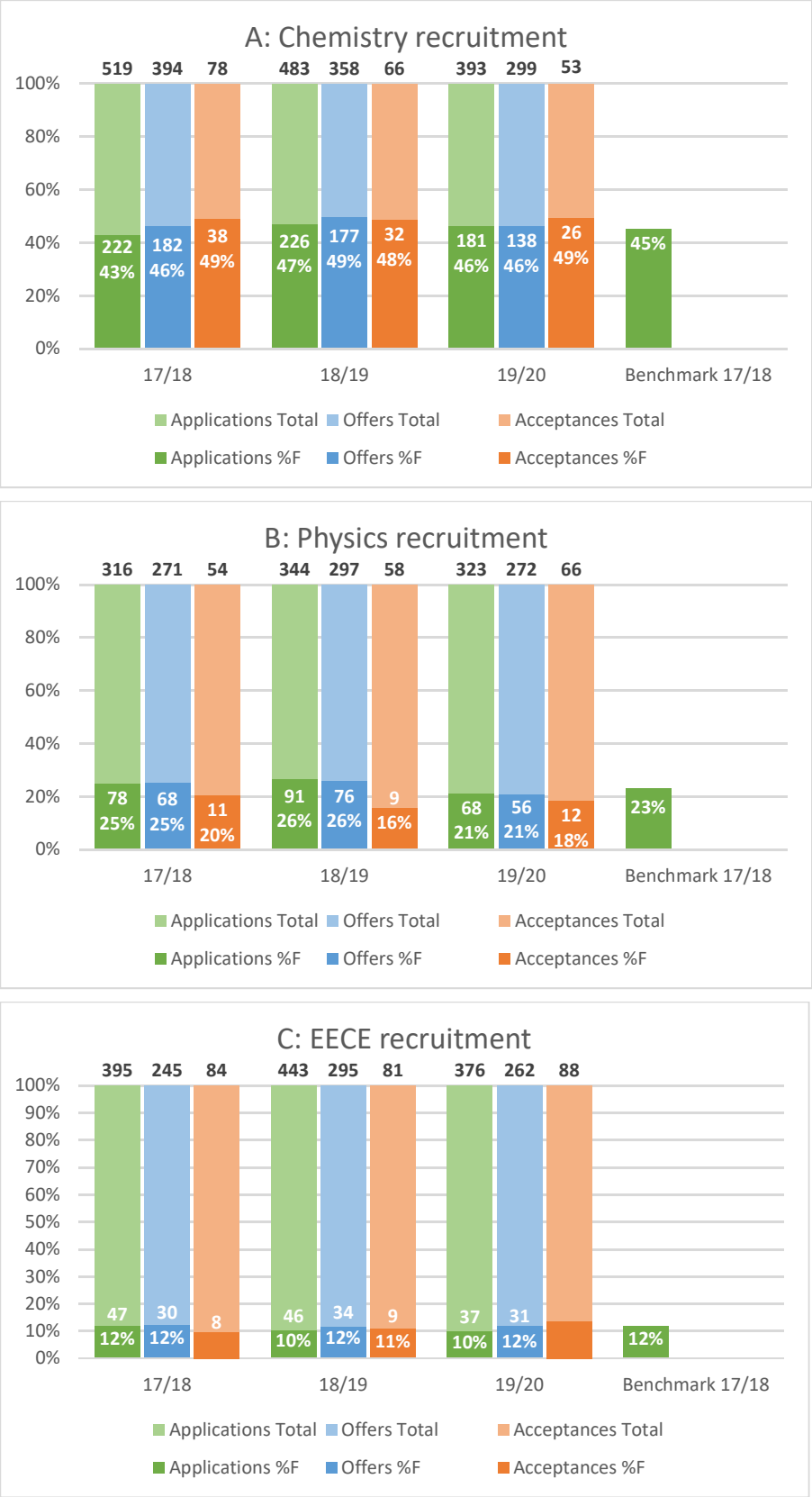
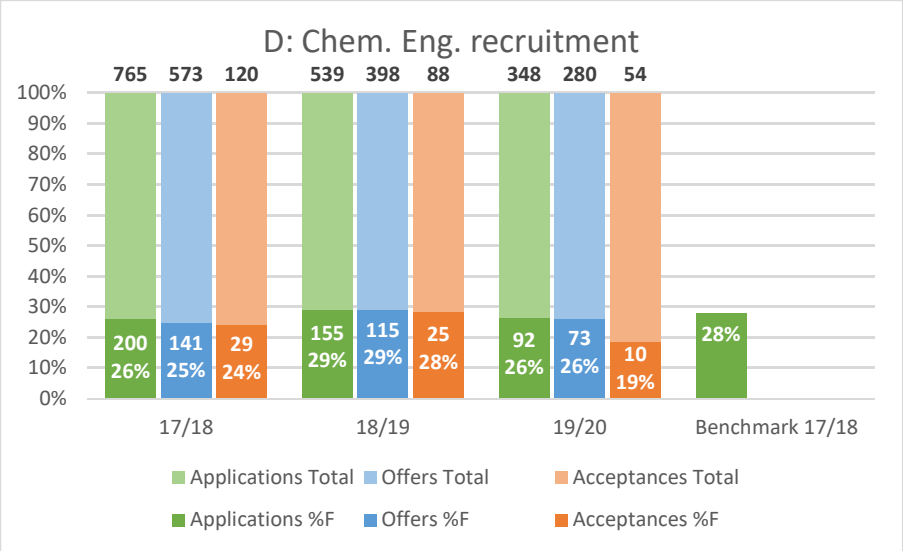
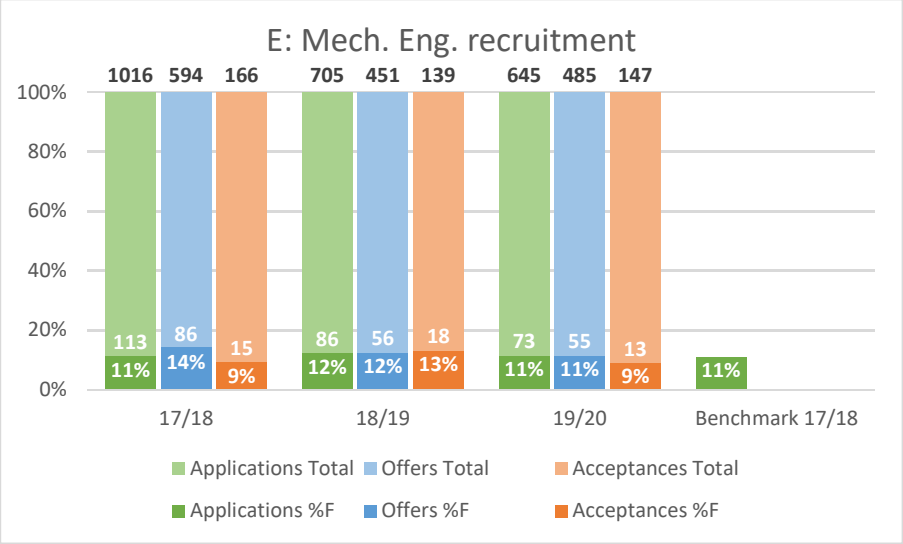


Figure 7 : Six-year evolution of numbers of UG applications, offers and acceptances, including % percentage female, at each stage per subject.





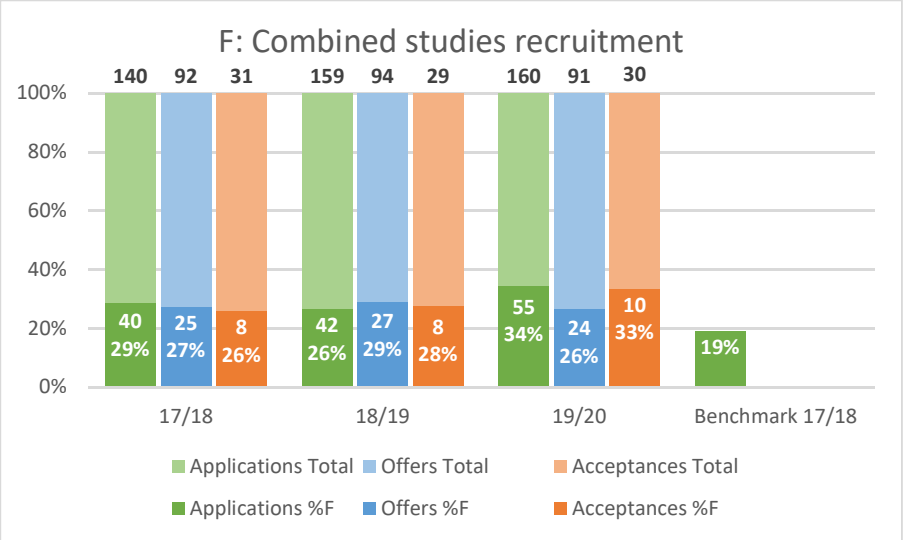


Figure 7 continued

In terms of **student attainment**, all of our first degree programmes (excluding CS) run with bifurcated Enhanced First Degree options; BEng/MEng in ME, CE and EECE, BSc/MPhys in Phys and BSc/MChem in Chem. Figure 8 aggregates MEng/MPhys/MChem and First Class or II(i) Hons as the high attainment levels for undergraduates by gender over the five main subjects (CS excluded), averaged over four years to simplify the picture. These data seem to suggest that, once selected, females do better than males in all subjects except ME, where almost identical results are achieved. From anecdotal evidence, use of small group first year tutorials, personal tutors and year directors overseeing progress may be helping boost female attainment and retention, although some of our initiatives may contribute (Figure 9)

The potential to improve the attainment of female undergraduates still further has led us to set up a procedure for identifying "lonely cohorts", defined as year groups where the population is less than 5 females, and a programme of activities which allows them to integrate with other female undergraduates in common activities. This is detailed in Action C4 and P4.

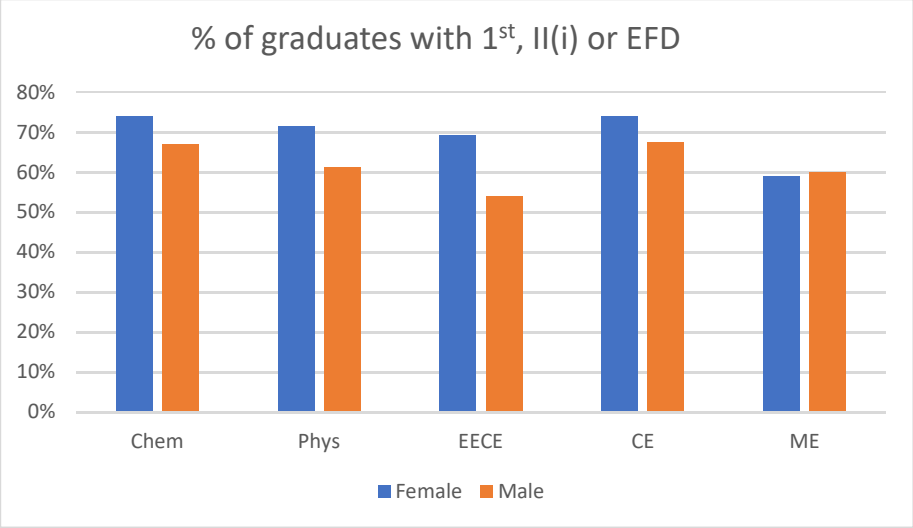


Figure 8 Percentage of graduates attaining Enhanced First Degree (EFD), or I or II(i) Honours degree across five subject areas. (Average over graduating years 2012/2016-2016/2019)

Figure 9: *The exit-level MEng course in professional studies, attended by all CE, ME and EECE students, includes a lecture series from professional engineers. In the 2018 presentation 6 of the 17 (35%) of the guest speakers were women, including two Heriot- Watt graduates. The course has a junior undergraduate level equivalent on which the senior undergraduates teach, offering an opportunity to address the lonely cohort effect.*

(iii) Numbers of men and women on postgraduate taught degrees

Full- and part-time. Provide data on course application, offers and acceptance rates and degree completion rates by gender.

Table 4 shows our overall taught postgraduate (**PGT)** population for the past 5 years, showing a steady rise from 19% (33 women) in 2015/16 to 33% (69 women) in 2019/20. Our current portfolio (Table 5) is dominated by MSc courses in Brewing and Distilling (CE/Biol.Sci.), Energy (ME/EECE) and a suite of courses in robotics and electronic systems (EECE/ME) none of which are located entirely in a given subject.

The numbers of part time PGT students is around 5.5%, and the number of women studying part time has increased in recent years, which may be a useful option for female returners after career breaks.

Table 4 Total number of Full Time and Part Time Students on PGT Courses

Year	Gender	Mode of Study		Total	Percentages Part Time
		Full Time	Part Time		
2015/16	**Female**	**(19%)**	**(10%)**	**(18%)**	**0.5%**
	Male	(81%)	(90%)	(82%)	5%
2016/17	**Female**	**(20%)**	**(9%)**	**(19%)**	**0.5%**
	Male	(80%)	(91%)	(81%)	5%
2017/18	**Female**	**(19%)**	**(20%)**	**(19%)**	**1%**
	Male	(81%)	(80%)	(81%)	4.5%
2018/19	**Female**	**50 (22%)**	**6 (43%)**	**56 (23%)**	**2.5%**
	Male	176 (78%)	8 (57%)	184 (78%)	3.3%
2019/20	**Female**	**69 (33%)**	**5 (42%)**	**74 (33%)**	**2.2%**
	Male	143 (67%)	6 (1%)	149(67%)	2.6%
	Unknown				

Table 5 Total Students (Headcounts) on MSc Courses

Year	Gender	"Home" Subject and Course Title(s)					All
		Chemical Engineering	**Electrical, Electronic & Computer Engineering**	**Mechanical Engineering**	**Physics**	**Brewing and Distilling**	
		>Sustainability Engineering >Oil and Gas Technology	>Vision, Image and Robotics >Smart Systems Integration >Mobile Communications >Embedded Systems	>Advanced Mech. Eng. >Energy	>Photonics	>Brewing and Distilling	
2015/16	Female	[redacted]	11	8	[redacted]	11	**34**
	Male	[redacted]	52	35	[redacted]	46	154
	Total	[redacted]	63	43	[redacted]	57	188
	% Female	**20.0%**	**17.5%**	**18.6%**	**0.0%**	**19.3%**	**18.1%**
2016/17	Female	5	9	10	[redacted]	13	**40**
	Male	16	54	40	[redacted]	47	171
	Total	21	63	50	[redacted]	60	166
	% Female	**23.8%**	**14.3%**	**20.0%**	**17.6%**	**21.7%**	**24.1%**
2017/18	Female	[redacted]	10	12	[redacted]	22	**49**
	Male	[redacted]	72	50	[redacted]	80	215
	Total	[redacted]	82	62	[redacted]	102	264
	% Female	**33.3%**	**12.2%**	**19.4%**	**16.7%**	**21.6%**	**18.6%**
2018/19	Female	6	16	6	[redacted]	25	**56**
	Male	5	67	53	[redacted]	58	184
	Total	11	83	59	[redacted]	83	240
	% Female	**54.5%**	**19.3%**	**10.2%**	**75.0%**	**32.4%**	**23.3%**
2019/20	Female	[redacted]	24	24	[redacted]	23	**74**
	Male	[redacted]	35	59	[redacted]	47	149
	Total	[redacted]	59	83	[redacted]	71	224
	% Female	**50%**	**40.7%**	**28.9%**	**22.2%**	**32.4%**	**32.9%**
2017/18 bench-mark	**% Female**	**27%**	**23%**	**12%**	**26%**	**27%**	

Dr Annie Hill is one of the mainstays of our MSc in Brewing and Distilling. She was co-founder of the member-based Scottish Distillers Association and has supervised over 100 MSc research projects and a range of PhD and KTP projects.

As part of a team including Brewery Manager Dr Dawn Maskell, Dr Jane White and Dr Rachel Sutherland, Annie has been at the forefront of challenging the "beard and tatoos" image of Brewing and Distilling and attracting more women into careers in these strategic Scottish industries.

Figure 10 Dr Annie Hill, Assistant Professor IB3

PGT recruitment for the last 3 years (Figure 11 and Table 6) shows a substantially improved percentage of women taking up offers; 19% (49 women) in 2017/18 to 33% (74 women) in 2019/20. This is remarkable against the background of relative stasis in our applicant pool; 20% (235 women) in 2017/18 to 18% (231 women) in 2019/20. Our MSc in Brewing and Distilling offers an opportunity to attract more women into PGT as our portfolio of offerings evolves (Figure 10)

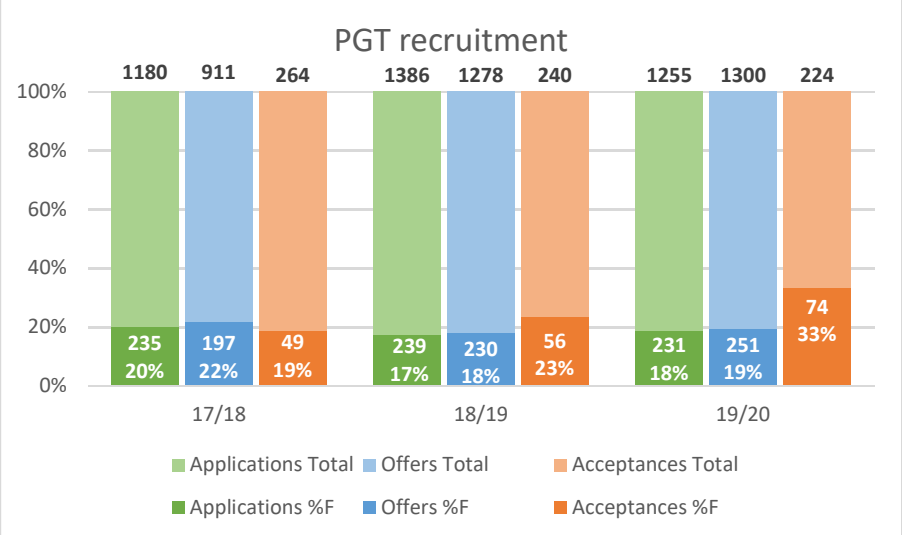


Figure 11 Applications, offers and acceptances for PGT Courses Programmes and Proportions of Students who are Female at each stage

Table 6 Applications, offers and acceptances for PGT Courses by Programme for the four years 2015/16 to - 2019/20

Year	Gender	Applications Received	Offers made	Offers Accepted	Percentage of applicants made offers	Percentage of offers accepted	Percentage of applicants accepting offers
CE	Female	199	129	18	64.8%	14.0%	9.0%
	Male	719	367	42	51.0%	11.4%	5.8%
	% Female	**21.7%**	**26.0%**	**30.0%**			
EECE	Female	144	122	53	84.7%	43.4%	36.8%
	Male	815	645	205	79.1%	31.8%	25.2%
	% Female	**15.0%**	**16.9%**	**20.5%**			
ME	Female	425	289	56	68.0%	19.4%	13.2%
	Male	2355	1506	217	63.9%	14.4%	9.2%
	% Female	**15.3%**	**16.1%**	**20.5%**			
Physics	Female	57	38	8	66.7%	21.1%	14.0%
	Male	134	79	28	59.0%	35.4%	20.9%
	% Female	**29.8%**	**32.5%**	**22.2%**			
Brewing and Distilling	Female	228	179	91	78.5%	50.8%	39.9%
	Male	603	410	270	68.0%	65.9%	44.8%
	% Female	**27.4%**	**30.4%**	**25.2%**			

PGT attainment data averaged over the last three years are shown in Figure 12. The %F who attain the Masters degree is similar to the %F enrolled on the class for all subjects except for EECE where proportionally fewer women gain the Masters qualification. ***Finding the reason for this decrease in EECE numbers at MSc level will be addressed in Action P5.***

Figure 12 PGT attainment summary for 2015/16 – 2018/19.

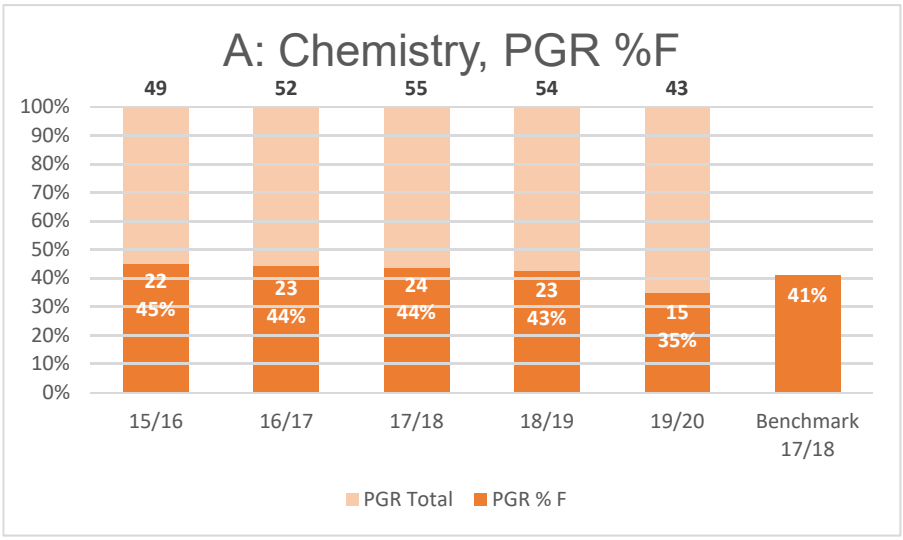
(iv) Numbers of men and women on postgraduate research degrees

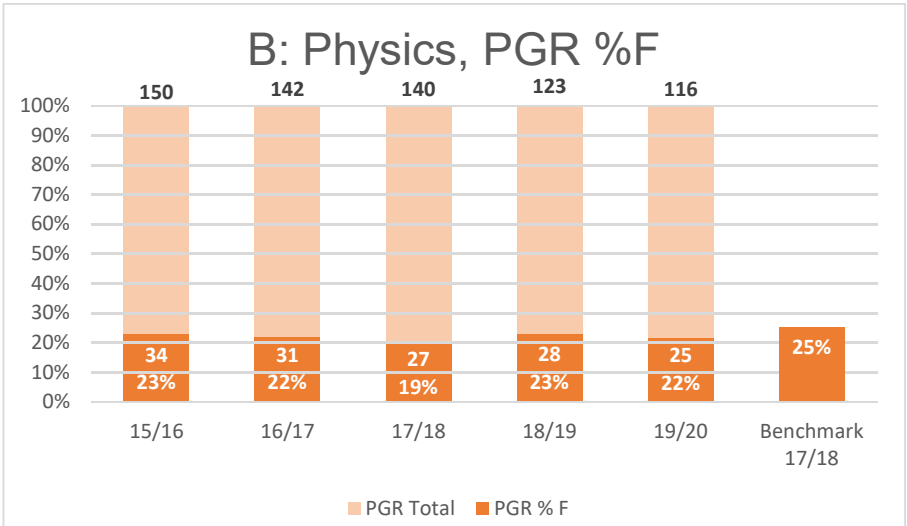
Our **PGR populations** for the years 2015/16–2019/20 remain close to the subject benchmarks, although with some year-to-year fluctuations (Table 7 and Figure 13 A-E) The main issues are:

- Total numbers peaked in 2016/17 and are now less than in 2015/16.
- In a number of our subjects, the %F dropped in 2019/20, some to below the benchmark.
- Our numbers of part-time PGR students are rather small (Table 8), and any trends are difficult to decipher.

*Table 7 Total Students (Headcounts) on PGR Courses (*Benchmark for specific EPS offering, Brewing and Distilling, not available)*

Year	Gender	Main Subject						All
		Chemical Engineering	Chemistry	Electrical, Electronic & Computer Engineering	Mechanical Engineering	Physics	Bioscience	
2015/16	Female	15	22	22	11	34	[redacted]	[redacted]
	Male	23	27	72	46	116	[redacted]	[redacted]
	Total	38	49	94	57	150	[redacted]	[redacted]
	% Female	**39.5%**	**44.9%**	**23.4%**	**19.3%**	**22.7%**	**100.0%**	**27.6%**
	% Female (national)	**33%**	**40%**	**20%**	**19%**	**25%**	*	
2016/17	Female	15	23	24	10	3100%	11	114
	Male	24	29	82	49	111	15	310
	Total	39	52	106	59	142	26	424
	% Female	**38.5%**	**44.2%**	**22.6%**	**16.9%**	**21.8%**	**42.3%**	**26.9%**
	% Female (national)	**34%**	**39%**	**20%**	**19%**	**25%**	*	
2017/18	Female	15	24	20	10	27	6	102
	Male	23	31	93	47	113	8	315
	Total	38	55	113	57	140	14	417
	% Female	**39.5%**	**43.6%**	**17.7%**	**17.5%**	**19.3%**	**42.9%**	**24.5%**
	% Female (national)	**35%**	**41%**	**19%**	**18%**	**25%**	*	
2018/19	Female	13	23	24	12	28	9	109
	Male	23	31	101	38	95	5	293
	Total	36	54	125	50	123	14	402
	% Female	**36.1%**	**42.6%**	**19.2%**	**24.0%**	**22.8%**	**64.3%**	**27.1%**
2019/20	Female	13	15	18	7	25	9	87
	Male	23	28	113	38	90	5	297
	Total	36	43	132	45	116	15	387
	% Female	**36.1%**	**34.9%**	**13.6%**	**15.6%**	**21.6%**	**60.0%**	**22.5%**


A: Chemistry, PGR %F
49
52
55
54
43
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
22
45%
23
44%
24
44%
23
43%
15
35%
41%
15/16
16/17
17/18
18/19
19/20
Benchmark 17/18
PGR Total
PGR % F


B: Physics, PGR %F
150
142
140
123
116
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
34
23%
31
22%
27
19%
28
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25
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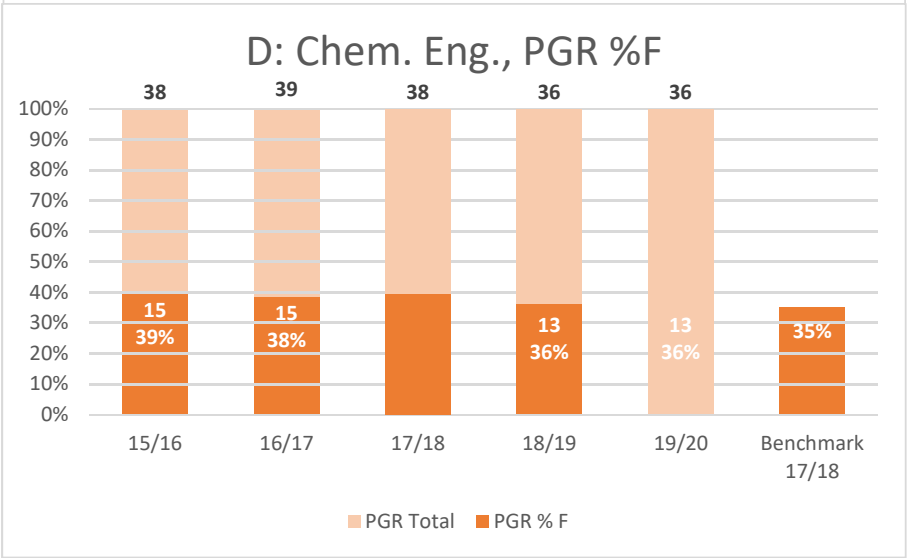
25%
15/16
16/17
17/18
18/19
19/20
Benchmark 17/18
PGR Total
PGR % F


D: Chem. Eng., PGR %F
38
39
38
36
36
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
15
39%
15
38%
13
36%
13
36%
35%
15/16
16/17
17/18
18/19
19/20
Benchmark 17/18
PGR Total
PGR % F

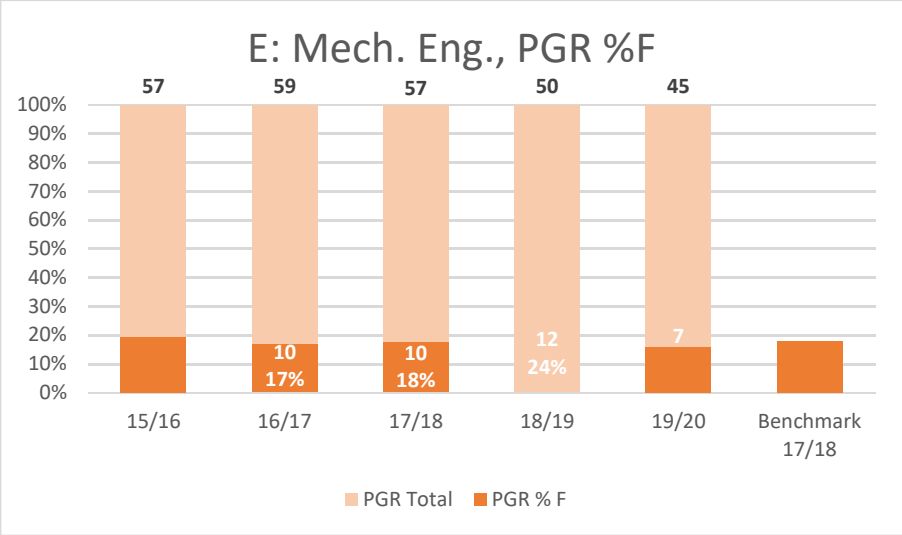


Figure 13 Numbers and percentages of female PGR students by subject.

Table 8 Total number of Full Time and Part Time Students on PGR Courses

Year	Gender	Mode of Study		Total	Proportion Part Time
		Full Time	Part Time		
2015/16	Female	[redacted]	[redacted]	[redacted]	2.8%
	Male	[redacted]	[redacted]	[redacted]	2.1%
2016/17	Female	[redacted]	[redacted]	[redacted]	1.8%
	Male	[redacted]	[redacted]	[redacted]	1.6%
2017/18	Female	[redacted]	[redacted]	[redacted]	2.0%
	Male	[redacted]	[redacted]	[redacted]	2.5%
2018/19	Female	[redacted]	[redacted]	[redacted]	2.8%
	Male	[redacted]	[redacted]	[redacted]	4.1%
2019/20	Female	[redacted]	[redacted]	[redacted]	1.1%
	Male	[redacted]	[redacted]	[redacted]	4.4%

PGR recruitment is easier to understand with a medium-term (5-year) aggregate (Table 9) students over the past three years. As can be seen, the main issues are:

- Our average recruitment rate of women is below benchmark in all of our subjects bar one, sometimes substantially so.
- There is little selection and conversion loss, so our main challenge is to attract a greater percentage of female applicants.

Table 9 Applications, offers and acceptances for PGR Courses by subject. Aggregate 2013/14 to 2017/18

Year	Gender	Applications Received	Offers made	Offers Accepted	Percentage of applicants made offers	Percentage of offers accepted	Percentage of total applicants receiving and accepting offers	Benchmark 2017/18
CE	Female	51	15	15	29.4	100.0	**29.4**	**35**
	Male	150	35	30	23.3	85.7	20.0	
	% Female	25.4	30.0	33.3				
Chem.	Female	107	28	27	26.2	96.4	**25.2**	**41**
	Male	209	37	35	17.7	94.6	16.7	
	% Female	33.9	43.1	43.5				
EECE	Female	141	27	25	19.1	92.6	**17.7**	**19**
	Male	810	122	115	15.1	94.3	14.2	
	% Female	14.8	18.1	17.9				
ME	Female	43	9	9	20.9	100.0	**20.9**	**18**
	Male	248	59	53	23.8	89.8	21.4	
	% Female	14.8	13.2	14.5				
Phys.	Female	150	33	32	22.0	97.0	**21.3**	**25**
	Male	520	122	118	23.5	96.7	22.7	
	% Female	22.4	21.3	21.3				

PGR outcomes are best assessed by the time taken to submit, completion within 4 years being considered acceptable with no mitigating circumstances. This measure has dramatically increased from 27% (4 theses) in 2015 to 67% (20 theses) in 2019, although we do not currently know what the reason is. This is considerably better than the parallel improvements for men. (Table 10).

Table 11 shows the numbers of PGR students who withdrew in each year from 2015–2019 compared with the numbers who completed within 4 years in the corresponding years. The data shows that PGR withdrawal is a potential cause for concern although it does not appear to be any worse for women than men.

Table 10 PGR submissions and completion times 2015-2019

	Total		Within 4 years		Within 5 years		6 + years	
	Female	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**
2015			27%	34%	73%	81%	27%	19%
2016			54%	55%	92%	85%	8%	15%
2017			59%	61%	94%	91%	6%	9%
2018			68%	49%	89%	84%	1%	16%
2019			67%	56%	100%	87%	0%	13%

Table 11 PGR student withdrawals.

	Female withdrawals	Female completions within 4 years	%Female withdrawals *vs* completions within 4 years	Male withdrawals	Male completions within 4 years	%Male withdrawals *vs* completions within 4 years
2015	[redacted]		0	[redacted]		10
2016			23			28
2017			23			15
2018			7			27
2019			20			23

A number of changes are currently being carried out to our PGR procedures in order to improve the research culture in EPS. Monthly meetings between supervisors and PhD students are now mandatory and an online website for entering comments from both has recently been rolled out. There is now a formal limit for the amount of demonstrating PhD students can do, in response to feedback from PhD students.

EPS was involved with five CDTs taking cohorts from 2014-2018 (Table 12). CDTs are currently managed separately from general PGR entry, and each has its own manager. In 2019, the Applied Photonics CDT was successfully renewed and had 12 students, (with 42% women) in its first cohort. We attribute this to the specific requirement for CDTs to act as beacons of EO&D.

Table 12 PGR students associated with CDTs from 2014-2018

	Applied Photonics CDT (HWU led)	**Robotics and Autonomous systems CDT (HWU led)**	**Condensed matter CDT**	**CRITICAT CDT**	**Embedded intelligence CDT**
Number of women	9	10	[redacted]	7	[redacted]
Total	50	72	[redacted]	20	[redacted]
%F	**18%**	**14%**	**14%**	**35%**	**18%**

Our analysis shows that recruitment numbers for women are below benchmark. In order to address this problem, we will introduce a scheme to encourage take-up of part-time options targeted towards females who might otherwise not apply to our PGR programmes. This is detailed in Action C7. In addition, we have identified significant differences in admissions processes and mentoring in PGR. We will therefore harmonise our PGR processes across the School to maximise our effectiveness and share good practice (such as in our CDTs). This is detailed in Action P6.

Dr Judith Abolle was a non-standard PhD entrant recruited directly from the pipeline engineering industry. Her background allowed her, exceptionally, and with the support of the School, to gain professional membership of IMechE whilst a student. Judith was awarded the University's Watt Club Prize at her PhD graduation in 2019 and went straight into an academic job, lecturing at Napier University

Figure 14: Dr Judith Abolle, PhD graduate in Mechanical Engineering, now Lecturer at Robert Gordon University

Progression pipeline between undergraduate and postgraduate student levels

Identify and comment on any issues in the pipeline between undergraduate and postgraduate degrees.

The transition between undergraduate and postgraduate levels is rarely one of progression, but is one of recruitment and selection. We work hard to encourage female undergraduates into research, for example using our Athena SWAN vacation scholarships, see Section 5.3(v). In our science subjects, recruitment of PGR students from the UG pool is common and relevant HoRIs are involved in fostering this recruitment.

That said, scholarships for PhD research are limited, and are often tied into specific schemes, such as CDTs, where the subject area is constrained. Irrespective of funding source, recruitment is nationally competitive. ***We recognise that it is therefore imperative to ensure that our processes do not have any gender bias in order for us to encourage female graduates into our PhD programmes, and consequently support the transition from PhD to CRS. This is detailed in Actions P2, P6 and P7.***

4.2. Academic and research staff data

(i) Academic staff by grade, contract function and gender: research-only, teaching and research or teaching-only

Look at the career pipeline and comment on and explain any differences between men and women. Identify any gender issues in the pipeline at particular grades/job type/academic contract type.

Figure 15 Structure of Heriot-Watt University job titles and associated career path illustrates the job titles used in the University for what are normally referred to as "Academic Staff". There are currently 24 "Teaching-dominant" (T&S) staff in EPS and 135 T&R. Almost all "Research Dominant" are CRS, and there are about as many of such staff as there are in the T&R category, who are, generally, their line managers. In pipeline terms, the main issue is the transition from CRS to T&R as this is the most competitive part of the "pipeline" and is almost always in our subjects from Research Associate (Grade

7) to Assistant Professor (Grade 8). Another important issue is the transition from PhD student to CRS; a transition directly from PhD student to T&R is very rare.

Table 13 shows a steady, but modest increase in the percentage females in our total headcount, from 18% (46 women) in 2015 to 23% (63 women) in 2019.

In our largest group, non-fixed term T&R academic staff, the percentage of women is low, but has grown significantly, from 11% (14 women) to 14% (19 women). We attribute this to our great attention to recruitment of academic staff in the relatively few cases where we have had vacancies. The effect of this policy can be seen more clearly in our next largest group (research only), many of whom might aspire to a T&R academic post where the growth is from 24% (29 women) to 31% (37 women). In our small group of T&S staff, the percentage of women has fluctuated between 27% and 50%, peaking in 2018 at 50%. ***These observations have informed some further specific actions in career development (MO13) and staff recruitment (P1 and P2), described elsewhere.***

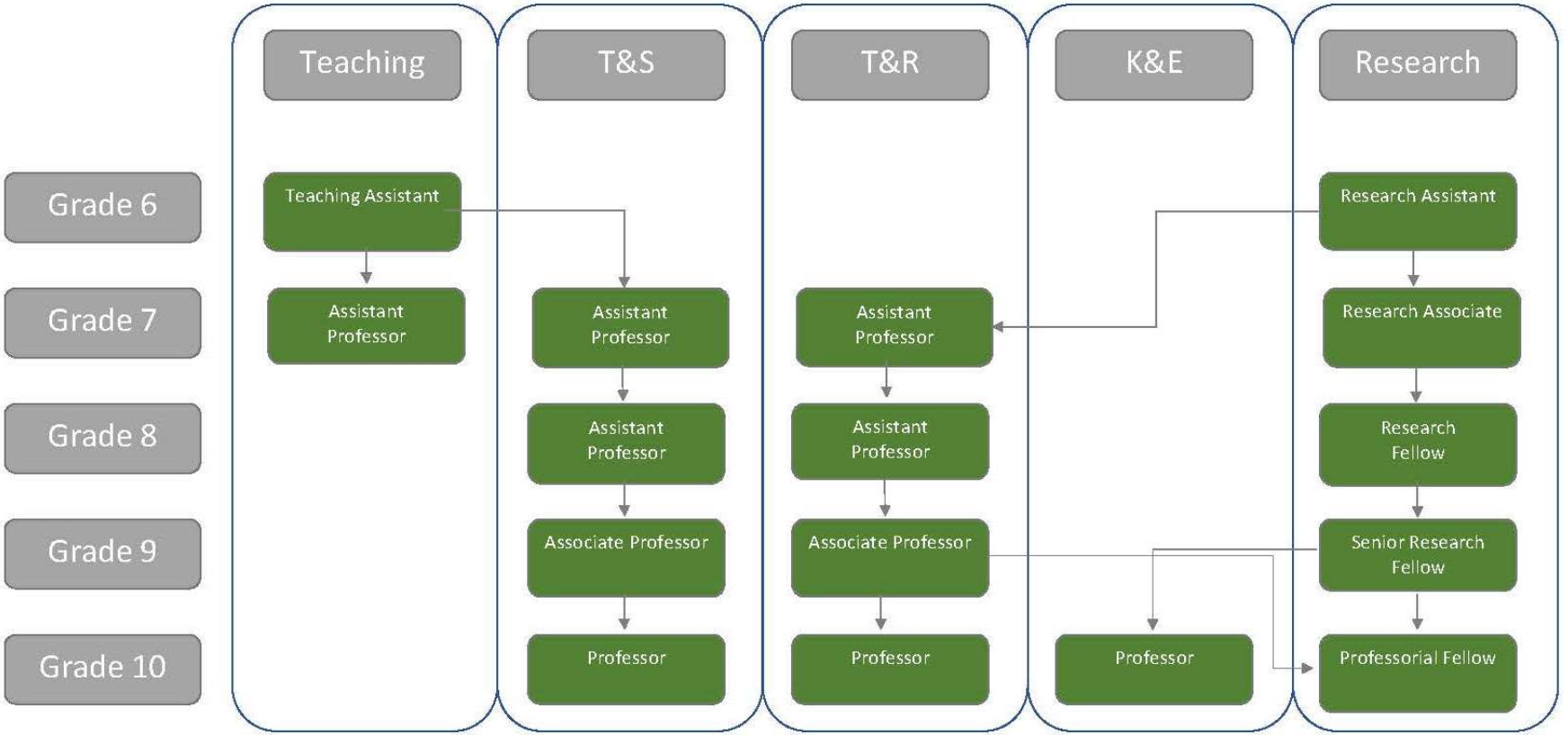


Figure 15 Structure of Heriot-Watt University job titles and associated career path

Table 13 Academic Staff by Career Path and Gender

Career Path	Gender	2015			2016			2017			2018			2019		
		Full-Time	Part-Time	All	Full-Time	Part-Time	All	Full-Time	Part-Time	All	Full-Time	Part-Time	All	Full-Time	Part-Time	All
Research Only	Female	[redacted]														
	Male	[redacted]														
	% Female	25%	17%	24%	25%	10%	24%	23%	33%	23%	23%	55%	24%	27%	70%	31%
Teaching & Research	Female	[redacted]														
	Male	[redacted]														
	% Female	12%	0%	11%	13%	50%	14%	13%	57%	15%	12%	57%	14%	12%	57%	14%
Teaching Only	Female	[redacted]														
	Male	[redacted]														
	% Female	27%	-	27%	33%	0%	29%	47%	-	47%	50%	-	-	29%	-	29%
Total Staff	Female	[redacted]														
	Male	[redacted]														
	% Female	19%	8%	18%	20%	22%	20%	19%	44%	21%	19%	55%	20%	20%	65%	23%

[redacted]

Figure 16 Proportions of all Academic and Research Staff who are Female by Grade.

Table 14 and Figure 16 summarise the evolution of the School's academic and research staff gender balance across the salary grades for the past five complete calendar years. In order to understand this evolution in career pipeline terms, it is necessary to separate out the three job functions (career paths); research-only (CRS), teaching & research (T&R) and teaching & scholarship (T&S).

Table 14 All Academic and Research Staff by Grade and Gender

Grade	Gender	2015	2016	2017	2018	2019
Grade 6	Female	[redacted]				
	Male					
	% Female	**0%**	**40%**	**33%**	**33%**	**40%**
Grade 7	Female	27	29	33	32	35
	Male	79	102	94	89	70
	% Female	**25%**	**22%**	**26%**	**36%**	**50%**
Grade 8	Female	9	14	8	9	6
	Male	45	43	41	41	45
	% Female	**17%**	**25%**	**16%**	**22%**	**13%**
Grade 9	Female	[redacted]	7	9	10	12
	Male		41	37	40	45
	% Female	**10%**	**15%**	**20%**	**25%**	**27%**
Grade 10	Female	[redacted]				6
	Male					42
	% Female	**7%**	**8%**	**10%**	**2%**	**14%**

Table 15 and Figure 17 show the proportions of women per grade for our research-only staff. For grade 7 (the main entry grade, and the usual exit grade), the proportion who are women shows a steady increase from 21% (22 women) in 2015 to 48% (30 women) in 2019. This increase is a result of a number of successful grant applications coinciding with a high number of women completing their post-graduate studies, who then successfully secured research positions. There are very few research only staff at grade 9+. For grade 8, likely to be externally-funded research fellowships for which candidates need to compete, usually from the CRS pool, the number of male staff has varied between 4 and 8, whilst the number of females has varied from 1 – 4. The University currently operates a Fellowship College that selects aspiring applicants for external fellowship for mentoring and advice within their respective schools.

Table 15 Research-only Staff by Grade and Gender

Grade	Gender	2015	2016	2017	2018	2019
Grade 6	Female	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	Male	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	% Female	0%	40%	33%	33%	40%
Grade 7	Female	22	25	26	28	30
	Male	76	95	85	81	62
	% Female	22%	21%	23%	35%	48%
Grade 8	Female	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	Male	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	% Female	33%	50%	14%	40%	50%
Grade 9	Female	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	Male	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	% Female		0%	0%		
Grade 10	Female	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	Male	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	% Female		0%	0%	50%	0%

Figure 17 Proportions of Research Only Staff who are Female by Grade.

The gender and grade distribution of our T&R staff are summarised in Table 16 and Figure 18 below. Grade 8 is the normal entry point, so the year-to-year variations are a combination of recruitment, promotion and departure (including to a promoted post at another university). Given the relatively small numbers of individuals in this group, it is not possible to draw any conclusions in pipeline terms, even in the aggregated data. The proportions of women T&R staff in Grades 9 and 10 show a very positive picture across the School, those at Grade 9 increasing from 8%F (women) in 2015 to 29%F (11 women) in 2019 and those at Grade 10 increasing from 8% (women) in 2015 to 13% (women) in 2019, which successes we attribute to the actions we have taken on promotion processes (Table 16).

Figure 18 Proportions of T&R Staff who are Female by Grade.

Table 16 Teaching and Research Staff by Grade and Gender

Grade	Gender	2015	2016	2017	2018	2019
Grade 7	Female					
	Male					
	% Female	60%	25%	25%	14%	33%
Grade 8	Female	5	9	7	6	
	Male	34	35	34	35	
	% Female	13%	20%	17%	17%	6%
Grade 9	Female		6	7	8	11
	Male		37	32	36	38
	% Female	8%	14%	18%	22%	29%
Grade 10	Female			5	5	5
	Male			43	41	40
	% Female	8%	8%	10%	12%	13%

The majority of Female T&S staff are either at Grade 7 or Grade 9 (Table 17 and Figure 19), and the percentages of women in both groups are relatively high compared with our T&R staff. The Grade 7 staff are mostly fixed-term appointments to cover teaching exigencies, whereas the Grade 9s are predominantly T&S staff who have chosen this career path; there is little or no progression between the two categories for either male or female staff. The School's seeks to avoid recruiting T&S staff on fixed-term contacts where possible, preferring to recruit T&R staff who can cover the pressure points on our teaching.

Table 17 T&S Staff by Grade and Gender

Grade	Gender	2015	2016	2017	2018	2019
Grade 7	Female					
	Male					
	% Female	67%	43%	63%	75%	44%
Grade 8	Female					
	Male					
	% Female	0%	20%	0%	50%	20%
Grade 9	Female					
	Male					
	% Female	33%	25%	33%	50%	13%
Grade 10	Female					
	Male					
	% Female	0%	0%			50%

Figure 19 Proportions of T&S Staff who are Female by Grade

Analysing the T&S data we have found a disproportional female/male ratio at Grade 7 with poor career progression prospects. In order to address this imbalance, we will through PDR and mentoring provide guidance for the early career T&S staff and identify clear career paths. This is detailed in Action MO3.

(ii) Academic and research staff by grade on fixed-term, open-ended/permanent and zero-hour contracts by gender

Comment on the proportions of men and women on these contracts. Comment on what is being done to ensure continuity of employment and to address any other issues, including redeployment schemes.

Table 18 summarises our fixed-term and open-ended contracts per career path. Amongst our T&R staff, only a minority are on fixed-term contracts; with the small numbers involved, it is difficult to discern any gender bias. Although absolute numbers are small there is a strong gender bias in the proportion of fixed-term contracts which is associated with the high %M in the applicant pool in some of our most popular teaching subjects, a situation which will persist for a year or so.

Another feature of Table 18 is the rapid growth in open-ended Research only contracts. This is a combination of CRS who are funded from a large and sustainable area of research and those who win externally-funded fellowships. Whichever is the reason, it appears from the figures that female and male staff are equally represented in this group.

We have found it challenging to provide our CRS with a framework with which they can feel fully included in the academic environment. In order to address this, we include our CRS in the PDR because it is the main mechanism we have for helping staff in this category to develop their careers and find their way into open-ended academic posts, if this is what they wish. We will therefore reinforce and monitor our management systems for CRS, ensuring that PDR and career development are linked and followed through. This is detailed in Action MO8.

Table 18 Number of Staff on Fixed Term and Open Ended Contracts by Career Path

Year	Gender	Research Only			Teaching & Research			Teaching Only		
		Fixed Term	Open Ended	% Fixed Term	Fixed Term	Open Ended	% Fixed Term	Fixed Term	Open Ended	% Fixed Term
2014	Female	30	0	100%	[redacted]	[redacted]	17%	[redacted]	[redacted]	50%
	Male	77	9	90%	[redacted]	[redacted]	4%	[redacted]	[redacted]	14%
2015	Female	[redacted]	[redacted]	97%	[redacted]	[redacted]	14%	[redacted]	[redacted]	67%
	Male	74	16	82%	[redacted]	[redacted]	4%	[redacted]	[redacted]	13%
2016	Female	26	8	76%	[redacted]	[redacted]	5%	[redacted]	[redacted]	60%
	Male	78	32	71%	[redacted]	[redacted]	3%	[redacted]	[redacted]	33%
2017	Female	25	6	81%	[redacted]	[redacted]	5%	[redacted]	[redacted]	43%
	Male	75	27	74%	5	110	4%	[redacted]	[redacted]	38%
2018	Female	27	5	84%	[redacted]	[redacted]	0%	[redacted]	[redacted]	17%
	Male	71	21	77%	[redacted]	[redacted]	5%	[redacted]	[redacted]	17%
2019	Female	[redacted]	[redacted]	87%	[redacted]	[redacted]	100%	[redacted]	[redacted]	29%
	Male	65	19	77%	[redacted]	[redacted]	2%	7	10	41%

(iii) Academic leavers by grade and gender and full/part-time status

Comment on the reasons academic staff leave the department, any differences by gender and the mechanisms for collecting this data.

Table 19 summarises leavers and leaving rates by career path and gender. In the core T&R group of staff, leaving rates are consistently lower for female staff. As many T&R leavers are retiring, the difference may only be due to the different age profiles of our male and female staff. In the T&S group, numbers of female leavers are very small (only 2 individuals over the past 5 years) so no conclusion can be drawn. Research-only leaving rates are dominated by phasing of fixed-term contracts and the increasing numbers year-on-year are simply due to an increased research volume. There is nothing in the data to suggest that leaving rates are influenced by gender and the rates are generally consistent with an average contract length of 3 years (i.e. 30%).

Our leaving rates for female open-ended contract holders (Table 20) are very positive in pipeline terms; numbers of women leaving are static in an environment where the numbers in post have almost tripled over the 3-year period.

Table 19 Leavers and Leaving Rates for Staff by Career Path and Gender

Career Path	Gender		2015	2016	2017	2018	2019
Research Only	Female	Staff	30	29	34	32	37
		Leavers	8	12	11	10	18
		Leaving Rate	**27%**	**41%**	**32%**	**31%**	**49%**
	Male	Staff	86	90	110	92	84
		Leavers	28	14	50	54	39
		Leaving Rate	**33%**	**16%**	**45%**	**59%**	**46%**
Teaching and Research	Female	Staff	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
		Leavers	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
		Leaving Rate	**0%**	**0%**	**5%**	**15%**	**5%**
	Male	Staff	105	108	119	119	116
		Leavers	5	8	11	11	5
		Leaving Rate	**5%**	**7%**	**9%**	**9%**	**4%**
Teaching and Scholarship	Female	Staff	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
		Leavers	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
		Leaving Rate	**0%**	**33%**	**0%**	**17%**	**0%**
	Male	Staff	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
		Leavers	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
		Leaving Rate	**0%**	**25%**	**33%**	**83%**	**0%**

Table 20 Leavers and Leaving Rates for Staff by Contract Type and Gender

Contract Type	Gender		2015	2016	2017	2018	2019
Fixed Term	Female	Staff	[redacted]	32	30	28	35
		Leavers	[redacted]	11	9	11	18
		Leaving Rate	**12%**	**34%**	**30%**	**39%**	**51%**
	Male	Staff	82	79	86	78	74
		Leavers	14	16	41	59	39
		Leaving Rate	17%	20%	48%	75%	53%
Open Ended	Female	Staff	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
		Leavers	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
		Leaving Rate	**27%**	**14%**	**10%**	**10%**	**4%**
	Male	Staff	116	127	155	139	143
		Leavers	19	8	24	11	5
		Leaving Rate	16%	6%	15%	8%	3%

Table 21 focuses on the effect of part-time status on leaving rates, the numbers being too low to separate by gender. For research-only contract holders, it is difficult to form any view on the effect of part-time working, irrespective of gender, both full-time and part-time staff showing the same general profile as already seen in Table 19. For T&R staff, the leaving rate of part-time staff is higher than for fixed-term contract-holders; however, the individuals concerned were all relatively late career and none were female. Similarly, the two part-time T&S leavers in the period (both male) were employed part-time before retiring.

Table 21 Leavers and Leaving Rates for Staff by Career Path and whether Staff are Full or Part Time

Career Path			2015	2016	2017	2018	2019
Research Only	Full Time	Staff	109	113	134	113	111
		Leavers	32	25	56	59	53
		Leaving Rate	**29%**	**22%**	**42%**	**52%**	**48%**
	Part Time	Staff			10	11	
		Leavers			5	5	
		Leaving Rate	**43%**	**17%**	**50%**	**45%**	**40%**
Teaching and Research	Full Time	Staff		116	133	132	128
		Leavers		6	11	13	6
		Leaving Rate	**3%**	**5%**	**8%**	**10%**	**5%**
	Part Time	Staff					
		Leavers					
		Leaving Rate	**29%**	**33%**	**17%**	**14%**	**0%**
Teaching and Scholarship	Full Time	Staff	9			12	24
		Leavers	0			0	0
		Leaving Rate	**0%**	**27%**	**13%**	**0%**	**0%**
	Part Time	Staff	0	0		0	0
		Leavers	0	0		0	0
		Leaving Rate	**0%**	**0%**	**100%**	**0%**	**0%**

Table 22 summarises leaving rates by grade. The Grade 6 and Grade 7 leavers are predominantly CRS, so there is little to say about this beyond what was covered above. For the main open-ended grades (8, 9 and 10), leaving rates have risen in each consecutive year for all three grades, most strikingly at Grade 8. Analysis of our individual leavers confirms what was said in relation to i.e. that leaving rates are dominated by relatively late-career, mostly male staff.

Word Count: 2646

Table 22 Leavers and Leaving Rates for Staff by Grade

Grade		2015	2016	2017
Grade 6	Staff	[redacted]	[redacted]	[redacted]
	Leavers	[redacted]	[redacted]	[redacted]
	Leaving Rate	100%	0%	80%
Grade 7	Staff	105	106	131
	Leavers	33	27	49
	Leaving Rate	31%	25%	37%
Grade 8	Staff	[redacted]	[redacted]	57
	Leavers	[redacted]	[redacted]	10
	Leaving Rate	4%	6%	18%
Grade 9	Staff	[redacted]	[redacted]	[redacted]
	Leavers	[redacted]	[redacted]	[redacted]
	Leaving Rate	2%	7%	10%
Grade 10	Staff	[redacted]	[redacted]	[redacted]
	Leavers	[redacted]	[redacted]	[redacted]
	Leaving Rate	5%	7%	8%

5. SUPPORTING AND ADVANCING WOMEN'S CAREERS

Recommended word count: Bronze: 6000 words | Silver: 6500 words

5.1. Key career transition points: academic staff

(i) Recruitment

Break down data by gender and grade for applications to academic posts including shortlisted candidates, offer and acceptance rates. Comment on how the department's recruitment processes ensure that women (and men where there is an underrepresentation in numbers) are encouraged to apply.

Positive action is embedded in the University recruitment process:

- Positive action statement in academic job adverts: ".. we understand that being diverse makes us better .. and value diversity at the heart of what we do. We want to increase the diversity of our workplace …."
  "We welcome and will consider flexible working patterns ..."
- Accreditations are displayed on job adverts: Athena SWAN, Disability Confident and Vitae HR Excellence in Research Careers
- The University rewards package references our family-friendly offer
- Use of online unconscious bias tool, the Gender Decoder to check adverts for gendered adjectives
- Policy of diversity in interview panellists, including male and female representation on all panels, where possible.

In addition, within the School we have taken action to:

- Include reference to our departmental Athena SWAN award in vacancy documentation/ discussions.
- Enhance the use of our networks to "headhunt" female applicants, and to contact directly applicants on a one-to-one basis to ensure broader diversity in our applicant pool

- Ensure more women are invited to give seminars with a view to expanding our knowledge of the potential applicant pool
- Improve the gender balance of our trained recruiter pool
- Make discussions around start-up packages more transparent where the future line manager gives clear advice on expected start up packages

Feedback from the 2018 staff survey suggests these changes are being felt and are supporting tangible culture change. Since 2014:

- an increase from 24% to 42% in women respondents agreeing/strongly agreeing that the School takes positive action to encourage women and men to apply for posts where they are underrepresented.

- a modest increase from 48% to 50% in recent female appointees (last 3 years) who said that they had been encouraged to apply by a member of staff at HWU.

- an increase from 41% to 71% of respondents who had participated in an interview panel (last three years) reporting that there was at least one male and one female on the panels they sat on.

These figures show an improving situation. However, our pipeline analysis strongly suggests that our main issue is attracting a higher proportion of female applicants. We will therefore, in addition to the standard advertisement routes, increase our efforts to identify potential applicants using our international networks of collaborators, and through WISE and WES, following up with a one-to-one communication to encourage applications. In addition, we will seek external advice to improve our Further Particulars. This is detailed in Action P1.

We have also identified the important role of Hiring Managers play in this respect. We will therefore ensure that equality and diversity awareness is prevalent at interviews. This is detailed in Action P2.

Table 23 and Table 24 summarise the positions to which we have recruited academic staff in the years 2016-2018, inclusive, separated by Grade[1]. In the period, we appointed 41 staff at Grade 8, 9 and 219 CRS at Grade 7, exceptionally 6. We did not recruit any professorial staff in the period. As can be seen from Figure 20 recruitment of academic staff is immensely competitive, with around 25 applicants for each post. Recruitment for T&R and T&S staff is overseen by the Head of School who sits on all interview panels. For all such appointments, the Hiring Manager is either one of the HoRIs or the DoL&T (Figure 1), all of whom have received tailored face-to-face unconscious bias training and University Recruitment and Selection Training. The search is global and is centred around advertisements which carry positive statements and which include a statement of the University and School charter marks. The Hiring Managers rely on contacts of their colleagues to bring the adverts to the attention of suitable candidates, through networks, at conferences and internally, as appropriate, paying attention to identifying suitable candidates from under-represented groups.

[1] Our recruitment processes are different for CRS than for T&R and T&S staff, and different again for professors. For CRS, the default Grade is 7 and for academic staff, these are sometimes advertised as Grade 8 or 9.

Table 23 Academic staff recruitment 2016-2019 at Grades 7, 8 or 9. NS = did not state gender on application 2016-2018

	Total Acad.	Female Acad	NS Acad	%Female Acad	%NS Acad
Applications	1045	151	33	14%	3%
Shortlisted	[redacted]	[redacted]	[redacted]	18%	5%
Offers	[redacted]	[redacted]	[redacted]	26%	5%
Acceptances	[redacted]	[redacted]	[redacted]	26%	5%

Table 24 Academic staff recruitment at Grade 7 (or 6). NS = did not state gender on application 2016-2018

	Total CRS	Female CRS	NS CRS	%Female CRS	%NS CRS
Applications	2057	458	112	22%	5%
Shortlisted	249	84	6	34%	2%
Offers	158	48	6	30%	4%
Acceptances	[redacted]	[redacted]	[redacted]	31%	3%

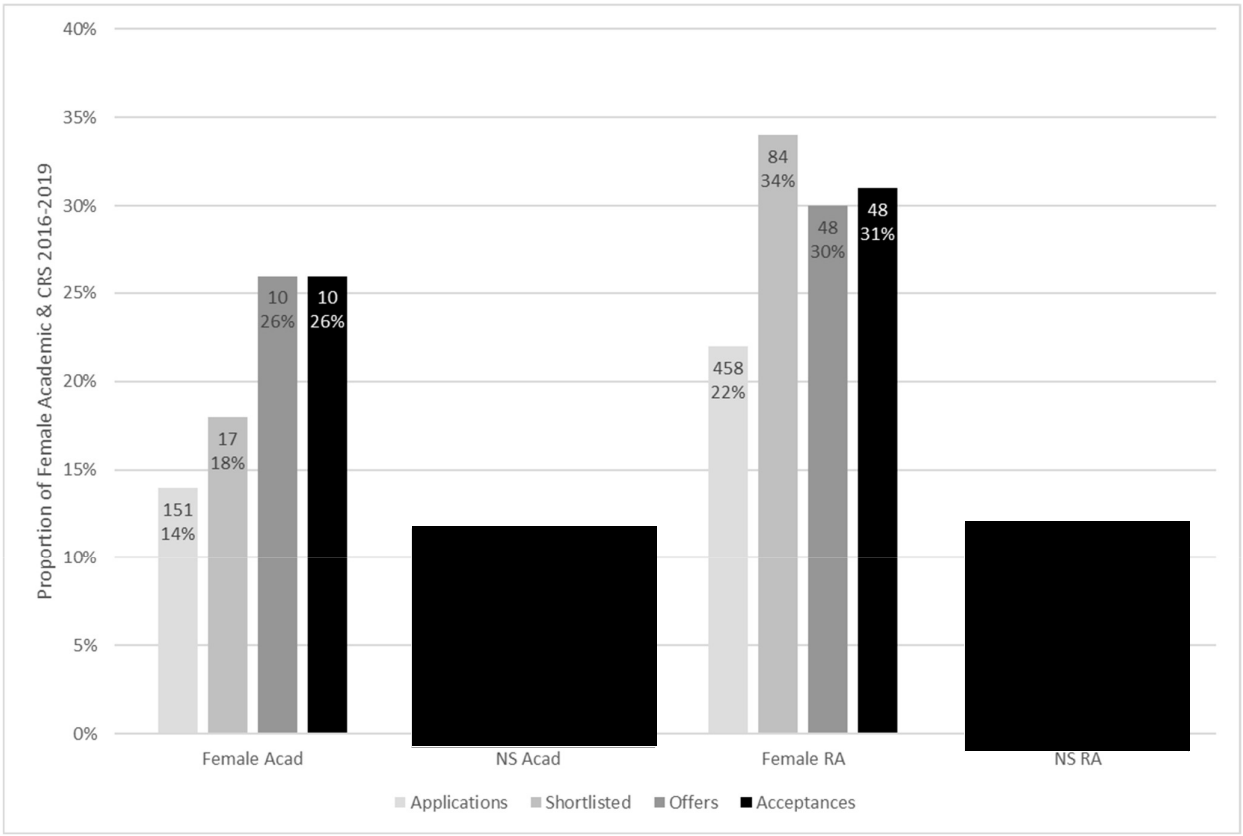


Figure 20 Recruitment chain for academic staff and RAs (CRS), Calendar years 2016-2019, NS = did not state gender on application

Shortlisting groups and interview panels are mixed gender as far as is possible. Of our 70 or so survey respondents who had taken part in an interview panel in the last three years 71% said that there was always at least one woman in 2018, compared with 41% in 2014. The take-up of training amongst this group of respondents was also good, especially amongst men undertaking diversity training (56%), although this could be better.

Figure 20 is testament to the success of our practices over the 25 posts we have recruited to in the 3-year period. Although the percentage of women applying for these posts is around the average for our current T&R staff (around 15%, Table 1), we have increased the percentages of women who are shortlisted and made offers to around 25%.

The recruitment processes for CRS follow the same principles as for academic staff, although, with around 180 posts and over 1800 applications, the responsibility of Hiring Manager needs to be delegated to individual grant-holders where there are some areas of good practice (Figure 21). The specialist nature of the recruitment pool results in a much lower ratio of shortlisted to successful candidates than for other academic posts.

Our analysis show that there is a considerable drop in the proportion of females between shortlisting and offers for CRS (25% to 17%). Therefore the impact of unconscious bias will be emphasised and made clear to the interview panels for CRS positions through compulsory training. This is detailed in Action P2.

(ii) Induction

Describe the induction and support provided to all new academic staff at all levels. Comment on the uptake of this and how its effectiveness is reviewed.

New T&R staff in EPS receive a start-up package of support to help them establish their research. On arrival, new staff (T&R, T&S and CRS) are welcomed by a named academic contact within the Research Institute and are assigned a "buddy" to help them work through a check-list of people to see.

Each new member of academic staff is assigned an academic mentor, intentionally distinct from their line manager, who provides guidance and support in their career development. Mentors are assigned by agreement between the HoS, the HoRI and the mentee, taking into account any preferences they have as to the gender of their mentor. Our 2014 and 2018 staff surveys indicated a significant increase in participation of women as mentors; in 2014 only 4% of female respondents said that they had acted as a mentor in the preceding three years compared with 41% in 2018.

The School has also surveyed staff views on the usefulness of mentoring and has tried to satisfy demand from those who do not currently have mentors. Figure 22 shows a drop in those who find mentoring useful or very useful between 2014 (75%) and 2018 (63%), the drop being larger amongst CRS (48% to 26%), where it is voluntary, than amongst female staff, including female CRS, (75% to 67%). Another feature of Figure 22 is that the unmet demand for mentoring dropped significantly between 2014 (34%) and 2018 (12%); however, the unmet demand amongst female staff is considerably higher than average, 48% in 2014 and 38% in 2018.

The above School processes are also self-reviewed as part of our continual iteration of the GPC between the SAT and SMG.

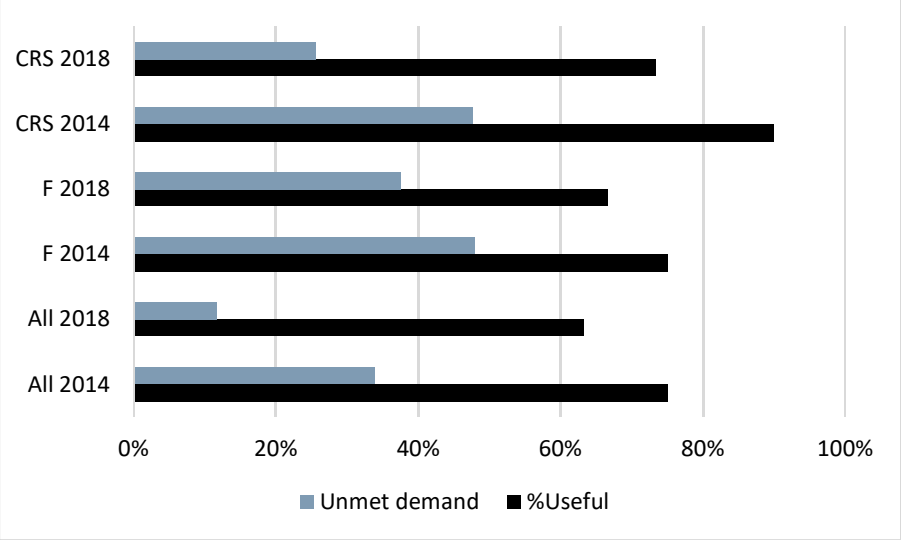


Figure 22 Percentages of respondents who find the mentoring they receive useful or very useful, and percentages of respondents who feel that they might be able to benefit (3 years to 2014 and 2018 surveys). Key as for Figure 47.

This data indicates that the mentoring scheme needs to be improved. A specific duty of mentors is to act as a "critical friend" for the mentee and training is currently provided on an informal basis. We wish to formalise the mentor's duties and associated training to ensure a minimum standard. We also wish to ensure that all categories of academic staff are assigned a mentor and that the interaction is effective, which we will address by annual monitoring through the PDR process. This is detailed by Actions MO2 and MO3.

Figure 23 summarises responses on our induction processes. Clearly, our current processes do not make staff feel as welcome as they did in the three years leading up to 2014 (76% in 2014 and 63% in 2018) and fewer report that they received EO&D training as part of their induction (39% in 2014 and 34% in 2018). Both of these changes affect women respondents more than the average (89% in 2014 and 56% in 2018 felt welcome and 39% in 2014 and 19% in 2018 reported EO&D training). In response to this, we have held focus-group discussions, which indicate that the induction process is too formalised, and seen as a tick-box exercise. Further consultations with CRS in 2019 suggested that more effective support could be provided on a tailored basis.

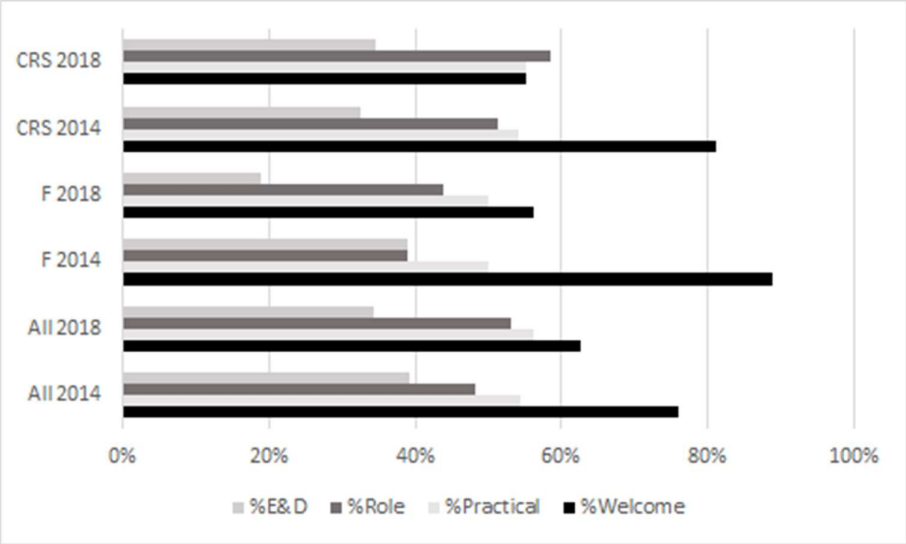


Figure 23 Percentages of respondents who reported that the induction they received; made them feel welcome, helped them to understand how the school works, explained their role and responsibilities, and provided EO&D training. Key: All = All academic staff, F = A

New T&R and T&S staff have a contractual probationary process, which normally lasts for three years. The mentor guides the probationer in setting their 3-year targets (in research, teaching and collegial contribution) and the steps along the way for annual review. The targets are agreed at the outset by the Probationer, the Mentor, the Line Manger, the HoS and a Dean, who provides a University-wide perspective on the appropriateness of the targets. The Probation Review Board, composed of the HoS, all HoRIs, the DoT&L, an HR Partner and the Dean, meets biannually to make decisions on those probationers who are close to an anniversary of appointment. Completion of probation (which may occur before or after the nominal three years) is when the Board is satisfied that the probationer:

- has developed into an effective and reflective teacher
- has developed an independent research identity and has a sustainable research plan with evidence of success
- has made an appropriate collegial contribution and has plans to develop this

For the period 2015 – 2018, EPS has 100% compliance with the process, a total of 29 members of academic staff having successfully completed their probation, 6 female (21%) and 23 male. There have been a few extensions to probation, but there have been no failures to meet the criteria.

As part of the self-assessment, the School carried out a series of focus group discussions with female and male T&R and T&S staff about the probation process. The main issue raised about the process was that criteria for successful completion of probation needed to be better explained. ***We will therefore overhaul our mentoring process, and provide a guide for probationers, clarifying the criteria and the role of targets. This is detailed by Action MO2.***

All new colleagues are invited to the University Networking Induction event within their first few months. This outlines Heriot-Watt's history, culture, governance and strategy, and embedding Athena SWAN, E&D policy and the University's Values. A networking

lunch allows new staff to meet key members of the senior management team. Feedback is annually reviewed by the University's Organisational Development Team to ensure that induction continues to be fit-for-purpose.

Data suggests that our induction processes are inadequate. We will therefore make them more welcoming, ensure that EO&D training is provided to all and introduce a more personal focussed induction process. This is detailed by Action MO9.

(iii) Promotion

Provide data on staff applying for promotion and comment on applications and success rates by gender, grade and full- and part-time status. Comment on how staff are encouraged and supported through the process.

The School runs an internal promotions panel, which makes recommendations to the appropriate University level Review Board. Key elements of our process are listed below with elements implemented since 2015 flagged as "new":

- All eligible staff are actively encouraged by the HoS to discuss their promotions plans at the annual PDR (new)
- The EPS discipline-specific Promotions Workshops allow participants to hear from recently promoted colleagues (new)
- Those whom the School supports are assisted by the Line Manager and HoS in configuring their case for the University Board.
- Those not supported are informed immediately with written feedback from the HoS, backed up by additional feedback from the Line Manager in sufficient time to allow them to make their case directly to the University Review Board should they so wish.

Table 25 summarises promotions data for the calendar years 2015-2019 by gender. Numbers are small and the different career paths (T&R/T&S/CRS) have been aggregated across the School.

Between 2015 and 2018, application rates for women have increased slightly from 5% ([redacted]) to 6% ([redacted]) with a peak in 2017 at 8% ([redacted]) and have consistently been above those for men. Success rates are 100%, with the exception of two personal case[redacted].

[redacted] successful applicant applied whilst on a career break. We would like to improve our communication around this possibility.

Table 26 presents promotions data for full-time and part-time staff by gender. Numbers of part-time staff are small (between 10 and 13 over the period) and only [redacted] part-time member of staff (female) has applied (successfully) for promotion in four years. Although the application rate (about 10%) is not less than for other staff, we would like to ensure that part-time staff are aware of the possibility.

This analysis indicates that we need to make staff aware of the university's policy and support people applying for promotion whilst on a career break. This is detailed by Action MO5.

Our staff surveys have provided feedback on academic staff experience of the promotions process:

- 31% of staff agree that our processes are transparent, the same as 2014, with women reporting a slightly higher level of agreement than the overall population (from 31% to 34%).
- There was a substantial increase (28% to 47%) in women agreeing that we communicate the promotions criteria clearly.
- 89% of female applicants for promotion reported that they had received useful advice from their line manager a considerable increase from 2014 (67%).

Centrally organised Promotion Workshops have been run every year (except 2017) since 2014. In direct response to the 2018 survey, the 2018 University workshop was held in the School and was addressed by the HoS.

Data suggests the transparency of promotion processes is improving but still not good enough. We therefore aim to further increase the clarity of our communication of promotions criteria, through continuous improvement and availability of our promotion workshops and more persistent reminders at critical times (pre-PDR and prior to promotions rounds). This is detailed in Action MO4.

Table 25Numbers of applications for promotion and numbers successful by Gender and Grade

Table 26 Numbers of applications for promotion and numbers successful by Gender and whether applicants are Full Time or Part Time

Year	Full Time/ Part Time	Gender	Applied	Eligible	Application rate	Promoted	Success Rate
2015	Full Time	Female	[redacted]	[redacted]	5%	[redacted]	50%
		Male			1%		100%
	Part Time	Female			0%		-
		Male			0%		-
2016	Full Time	Female			5%		100%
		Male			4%		100%
	Part Time	Female			0%		-
		Male			0%		-
2017	Full Time	Female			9%		100%
		Male			3%		100%
	Part Time	Female			0%		-
		Male			0%		-
2018	Full Time	Female			5%		100%
		Male			6%		80%
	Part Time	Female			13%		100%
		Male			0%		-
2019	Full Time	Female			7%		100%
		Male			8%		86%
	Part Time	Female			13%		100%
		Male			0%		-

(iv) Department submissions to the Research Excellence Framework (REF)

Provide data on the staff, by gender, submitted to REF versus those that were eligible. Compare this to the data for the Research Assessment Exercise 2008. Comment on any gender imbalances identified.

REF returns are organised at University level, with input from HoSs and HoRIs. The University had a selection policy for RAE 2008 and REF 2014, but our processes in 2008 did not require data outlining the proportion of eligible staff submitted. E&D data was collected and used for monitoring purposes and our E&D report showed no detrimental impact linked to equality characteristics.

Table 27 Eligible and submitted staff numbers to the RAE2008 and REF2014

	Eligible		Submitted			Submission rate	
	F	M	F	M	%F	F	M
RAE 2008	N/A	N/A	17	117	13	N/A	N/A
REF 2014	14	126	14	109	11	100%	87%

SILVER APPLICATIONS ONLY

5.2. Key career transition points: professional and support staff

(i) Induction

Describe the induction and support provided to all new professional and support staff, at all levels. Comment on the uptake of this and how its effectiveness is reviewed.

(ii) Promotion

Provide data on staff applying for promotion, and comment on applications and success rates by gender, grade and full- and part-time status. Comment on how staff are encouraged and supported through the process.

5.3. Career development: academic staff

(i) Training

Describe the training available to staff at all levels in the department. Provide details of uptake by gender and how existing staff are kept up to date with training. How is its effectiveness monitored and developed in response to levels of uptake and evaluation?

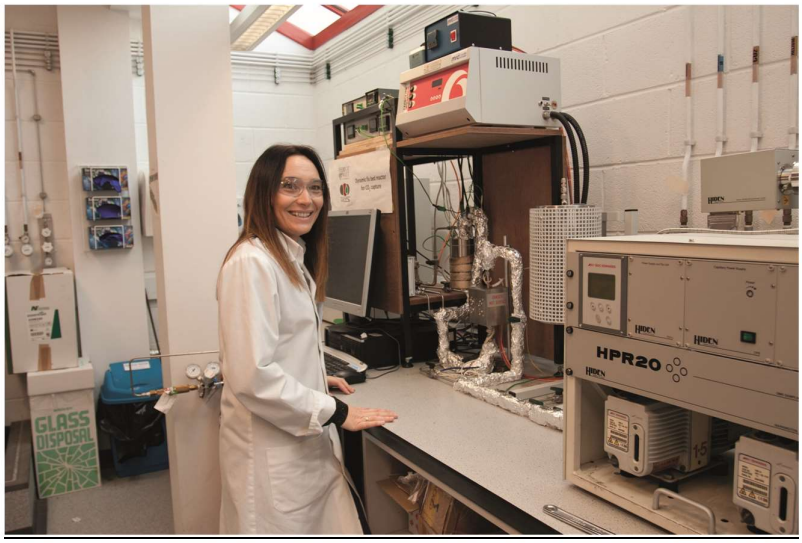
Leadership and coaching is offered through a number of our leadership and management programmes, and also by request. Since 2013, the University has participated in the Leadership Foundation's *Aurora* programme, which offers women-only leadership development training, and includes mentorship. Table 28 shows the uptake of these opportunities by EPS staff since its inception. Overall, there have been 14 EPS participants, comprising 11 academic (e.g. Figure 24) and 6 professional services staff.

There is a wide range of other training opportunities available to all staff in various forms including internal and external training as well as numerous e-learning courses, some of which are compulsory. Staff are also encouraged to identify specialist or technical training during PDR. We also provide focussed informal support for early career researchers in writing successful grant proposals (see Section v). There is currently no generic record of training held either within the School or Centrally.

We acknowledge the importance of leadership training and providing role models for female staff and students (Figure 24). We will therefore maintain funding support for the Aurora programme and further encourage uptake of the programme by EPS staff via enhanced advertising and case-studies of past participants. We are also committed to making the programme more accessible to CRS who arguably have a more acute need. This is detailed in Action MO10 and P3.

Table 28 Aurora uptake by EPS Academic and PS Staff

Year	Number
2013	[redacted]
2014	[redacted]
2015	[redacted]
2016	[redacted]
2017	[redacted]
2018	[redacted]
2019	[redacted]



Dr Susana García, Associate Professor in Chemical Engineering and Associate Director in Carbon Capture and Storage at the Research Centre for Carbon Solutions: I was a participant in the Aurora programme, shortly after joining the School as an Assistant Professor in 2014. The advice that I received through the scheme, and from my senior colleagues helped me to identify my leadership role in the development of processes and novel materials to remove carbon dioxide in chemical engineering processes such as making steel and cement. I was delighted that my hard work and contribution to HWU Research and Teaching strategic objectives was recognized by my promotion to Associate Professor in 2017.

Figure 24 Dr Susana García, Associate Professor in Chemical Engineering and former participant in Aurora scheme

(ii) Appraisal/development review

Describe current appraisal/development review schemes for staff at all levels, including postdoctoral researchers and provide data on uptake by gender. Provide details of any appraisal/review training offered and the uptake of this, as well as staff feedback about the process.

HWU operates a formal annual Performance and Development Review (PDR) process, which requires each member of staff to have an annual recorded meeting with an appropriate reviewer who is delegated by the line manager. Table 29 summarises the non-compliance rates on PDR for the past 4 years, as recorded in iHR. These records include staff who are under notice or leave during the annual cycle, and for whom a full PDR is not recorded, a factor which affects CRS rather more than T&S and T&R academic staff. Our 2014 and 2018 staff surveys (Figure 25) confirm very high compliance rates (96-97%) amongst T&S and T&R staff, coupled with a considerable improvement in compliance across the whole spectrum between 2014 and 2018. Particularly gratifying is the increase in compliance amongst female academic staff (88% to 97%) between 2014 and 2018. It is likely that phasing of fixed-term contracts and the PDR cycle leads to high apparent non-compliance rates amongst CRS. This needs some further investigation before we conclude that there is a particular issue which needs action.

Table 29 Non-compliance in PDR Academic and Research Staff (source iHR records).

	2015			
	%F	**%F (ex CRS)**	**%M**	**%M (ex CRS)**
IMPEE	50%	25%	31%	14%
ICS	33%	0%	13%	0%
IPaQS	50%	0%	7%	0%
ISSS	45%	9%	31%	29%
IB3	19%	0%	33%	17%
Average	**40%**	**7%**	**23%**	**12%**

	2016			
	%F	**%F (ex CRS)**	**%M**	**%M (ex CRS)**
IMPEE	30%	0%	31%	4%
ICS	25%	0%	3%	0%
IPaQS	13%	0%	17%	0%
ISSS	38%	0%	36%	28%
IB3	21%	8%	13%	6%
Average	**25%**	**2%**	**20%**	**8%**

	2017			
	%F	**%F (ex CRS)**	**%M**	**%M (ex CRS)**
IMPEE	71%	57%	81%	48%
ICS	40%	0%	21%	0%
IPaQS	14%	0%	17%	0%
ISSS	45%	0%	37%	33%
IB3	27%	8%	10%	3%
Average	40%	13%	33%	17%

	2018			
	%F	**%F (ex CRS)**	**%M**	**%M (ex CRS)**
IMPEE	13%	6%	43%	48%
ICS	3%	0%	23%	15%
IPaQS	9%	3%	21%	7%
ISSS	13%	6%	57%	55%
IB3	16%	4%	9%	8%
Average	40%	13%	33%	17%

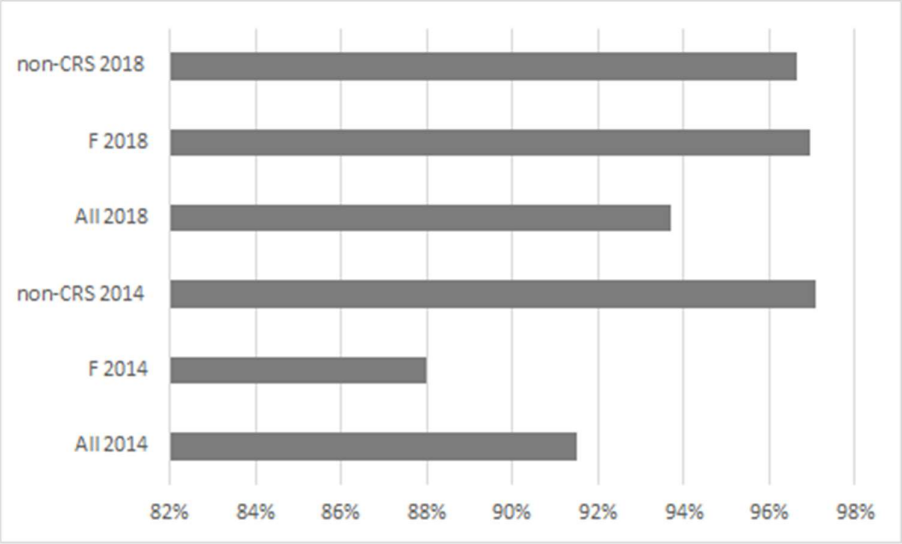


Figure 25 Percentages of respondents who agreed that they have a PDR at least once a year (2014 and 2018 surveys). Key as for Figure 47.

For the first time in 2018, the staff survey asked respondents' views on the PDR process, Figure 26. Amongst the sub-groups shown, it is clear that female staff found the process more useful (75%) and fair (61%) than the academic staff generally (58% and 53%). However, there are significant proportions of staff who do not find the PDR process useful (around 50%) and around 20% find it stressful. Although these figures show no significant gender differences we will investigate how we can improve the situation. From holding focus groups with CRS staff it seems that they feel they would benefit from a PDR process that was solely for them, one that would help with career progression, see ***Action MO8***.

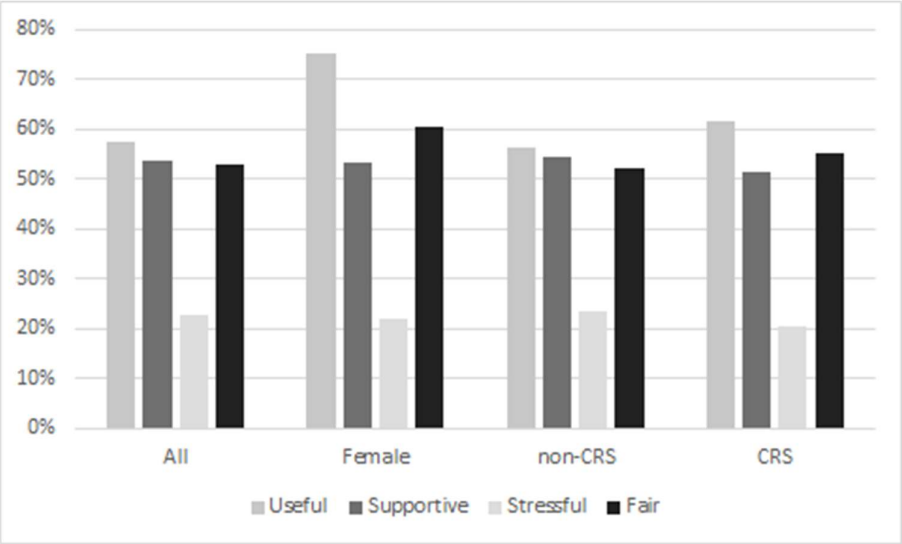


Figure 26 Percentages of respondents who agreed with each of four descriptors of how they found the PDR process (2018 survey). Key as for Figure 47.

(iii) Support given to academic staff for career progression

Comment and reflect on support given to academic staff, especially postdoctoral researchers, to assist in their career progression.

Currently, our main vehicle for supporting academic staff on progression is PDR, and our staff survey is the main way in which we receive staff perceptions of the support they have had. Figure 27 shows that, between 2014 and 2018, there was a general increase in reported discussion/preparation for promotion from 45% to 59%, the increase being less for CRS (43% to 53%) and more (36% to 55%) for female staff. In the 2018 survey (question not asked in 2014), 64% of staff reported that their long-term career progression was an item discussed at PDR and this was slightly higher amongst female staff (66%) and lower for CRS (58%)

This data shows that we need to take action to improve on these increases. We will therefore encourage and monitor line managers in discussing long-term progression, with a particular focus on CRS, for whom almost every member of T&R staff is a reviewer. This is detailed by Action MO8.

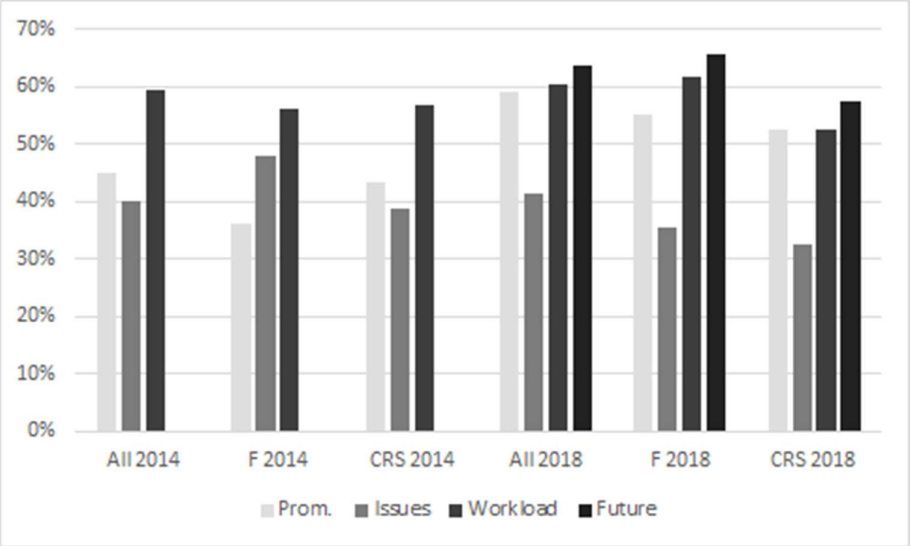


Figure 27 Percentages of respondents who reported that their PDR covered: preparation for promotion, issues affecting career progression, workload, and long-term development (2014 and 2018 surveys). Key as for Figure 47.

(iv) Support given to students (at any level) for academic career progression

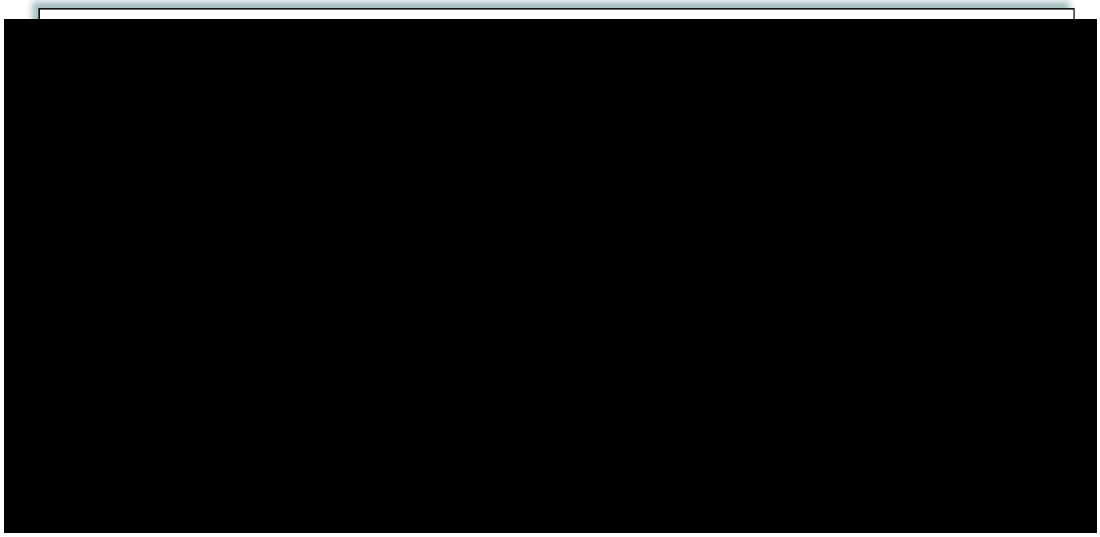
Comment and reflect on support given to students at any level to enable them to make informed decisions about their career (including the transition to a sustainable academic career).

Supervisors of penultimate and final year project UG students also act as student mentors and there is significant informal discussion about careers, particularly for those who are interested in PGR. All of the Research Institutes have schemes for offering senior

undergraduates an opportunity to experience research over the summer vacation (e.g. Figure 28).

2018 saw the launch of the EPS Athena SWAN summer bursary scheme with 8 undergraduates, mostly in their final year of study being awarded bursaries. The aim is to allow female UG students to experience research in one of the School's main areas. We followed this up in 2019 with a further 8 bursaries.

We acknowledge the importance of these bursaries as a recruitment mechanism for further PhD studies. We will therefore provide further funding for summer bursaries, as detailed in Action C3.



The PGR student inductions provided at institute, school and university level together with pastoral support schemes map onto a School-wide support programme. Furthermore, we ensure that female PGR students do not have a male-only mentoring or academic progression panel wherever possible; however, this must operate within academic constraints and avoiding overloading female colleagues.

A small group of PGR students have won a Research Culture Grant from the University's Research Futures academy to run a series of events aimed at combating isolation amongst research students in subjects where women are under-represented. ***The SAT is delighted by this development and see it as a sign of culture change in EPS. We will therefore support this group and provide means of rolling representation of this network on the SAT. This is detailed in Action C9.***

As well as offering part-time options for PhD study, we wish to be proactive in offering parental leave for PGR students.

We have identified an inconsistency in the provision of parental leave for PGR students. We will therefore provide the same standard UKRI level of parental leave and support for all PhD students irrespective of funding. This is detailed in Action MO6.

(v) Support offered to those applying for research grant applications

Comment and reflect on support given to staff who apply for funding and what support is offered to those who are unsuccessful.

The University has in place an electronic system for recording and approving proposals for external research funding. The system has a Peer Review function and the School has a policy on peer review, which is well-publicised and is actively used by the approver (normally a HoRI) to support staff in making successful proposals. A recent (August 2018) audit showed that compliance with the peer review process has a positive influence on success rates and this has been fed back to T&R academic staff to encourage them to engage positively with peer review (Figure 29). For probationary staff, and those applying for major initiatives, the HoS plays a positive role in peer review and this has been particularly effective. For example, of the last 20 "New Researcher/First Grant" proposals made in the School, 10 were successful, well above the average for the sector. New researchers are fostered at all stages of proposal-making, including response to reviewers and advice on the way forward in the event that a proposal is not successful.

As part of our research performance review, we have extracted relative rates of making proposal and being successful, Table 30. Although these data do not show any cause for concern, investigation at Research Institute level will be instructive for us. ***We have consequently identified a clear need to provide sufficient time and support for writing research grant applications. This is detailed in Action P8.***

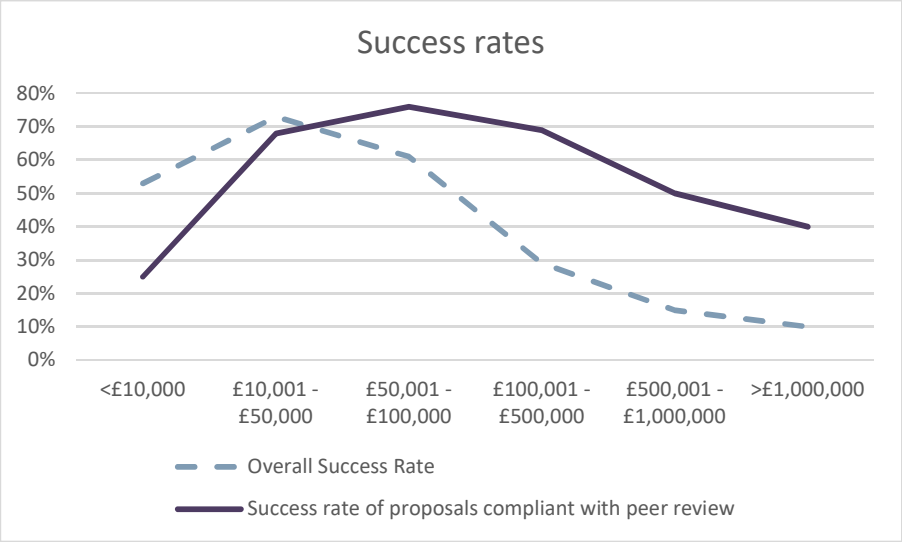


Figure 29 Effect of peer review on EPS grant proposal success rates.

Table 30 Proposal success performance data 2015-2019

Totals for EPS	2015	2016	2017	2018	2019
Submitted - Male	257	287	231	233	240
Submitted - Female	47	43	41	29	47
Total submitted	304	330	272	262	287
Successful - Male	132	119	88	81	81
Successful - Female	**17**	**21**	**16**	**9**	**14**
Total Successful	149	140	104	90	95
Success rate - Male	51.36%	41.46%	38.10%	34.76%	33.75%
Success rate - Female	**36.17%**	**48.84%**	**39.02%**	**31.03%**	**29.79%**
Total success rate	49.01%	42.42%	38.24%	34.35%	33.10%

The University has a Fellowship College which exists to support staff wishing to apply for research fellowships hosted by the University. The college is often used by CRS who wish to establish their research leadership. Of the 85 EPS applications made to the College since August 2016, 55 were approved to be supported by the School to make full applications, an overall success rate of 65%. The success rate of the 12 female EPS applicants (e.g. Figure 30) was 75%.

Word Count: 1351

[redacted]

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5.4. Career development: professional and support staff

(i) Training

Describe the training available to staff at all levels in the department. Provide details of uptake by gender and how existing staff are kept up to date with training. How is its effectiveness monitored and developed in response to levels of uptake and evaluation?

(vi) Appraisal/development review

Describe current appraisal/development review schemes for professional and support staff at all levels and provide data on uptake by gender. Provide details of any appraisal/review training offered and the uptake of this, as well as staff feedback about the process.

(ii) Support given to professional and support staff for career progression

Comment and reflect on support given to professional and support staff to assist in their career progression.

5.5. Flexible working and managing career breaks

Note: Present professional and support staff and academic staff data separately

(i) Cover and support for maternity and adoption leave: before leave

Explain what support the department offers to staff before they go on maternity and adoption leave.

The School ensures that University maternity and adoption leave policies are available online and signposted via the EPS intranet. Prior to new staff joining, we send a welcome email that highlights and provides links to all our Family Friendly policies. These links are also highlighted regularly to all staff. To assist managers to support their staff we developed and piloted a Maternity/Adoption Leave Checklist to guide the discussions required at each stage and provide a record that these happened. This EPS pilot checklist has been adopted by the University and is now available for all staff at Heriot-Watt University.

(ii) Cover and support for maternity and adoption leave: during leave

Explain what support the department offers to staff during maternity and adoption leave.

Whilst on leave staff are encouraged to take their 10 keeping in touch days as well as remaining on their allocated mailing list allowing them, if they wish, opportunity to keep up to date with any School/University communications and attend any events if they wish to.

(iii) Cover and support for maternity and adoption leave: returning to work

Explain what support the department offers to staff on return from maternity or adoption leave. Comment on any funding provided to support returning staff.

Because of the distribution of cases (some line managers have not experienced maternity leave in the last 5 years), monitoring data is difficult to come by at School level. The School therefore follows University policy, and line managers are regularly reminded and local advice made available on an *ad hoc* basis.

This advice includes a new initiative designed to support T&R staff on return from a career break, in that they should not be required to develop teaching materials in their first semester unless it is part of their career development plan.

Nevertheless, staff survey and feedback suggests that it is challenging taking a career break and maintaining an active research agenda. We will therefore ensure that managers have been following the policies and procedures, and that staff are fully supported both during and on return from leave. This is detailed by Action C10.

(iv) Maternity return rate

Provide data and comment on the maternity return rate in the department. Data of staff whose contracts are not renewed while on maternity leave should be included in the section along with commentary.

From 2015 to 2019 a total of 26 academic staff in EPS have been on maternity leave (*Table 31*) and all T&R and T&S staff have returned to work, which encourages us that our policies are having an effect. In 2019, nine academic staff took maternity leave, three of whom are on their second period of maternity leave. As part of ***Action C10***, we will meet them on return to discuss their experience, including a comparison for those on their second period of maternity leave.

Two Research-only staff members did not return, one in 2017 (who decided not to return to work), the other in 2019 (whose funding expired).

Of the 2 PS staff, one has returned and is still in post, and the other successfully applied for voluntary redundancy.

Table 31 Maternity Leave

Year	Staff Category	Number taking leave	Number still on leave	Number returned
2015	Professional Services	[redacted]		
	Research-only			
	Teaching & Research			
	Teaching & Scholarship			
2016	Professional Services			
	Research-only			
	Teaching & Research			
	Teaching & Scholarship			
2017	Professional Services			
	Research-only			
	Teaching & Research			
	Teaching & Scholarship			
2018	Professional Services			
	Research-only			
	Teaching & Research			
	Teaching & Scholarship			
2019	Professional Services			
	Research-only			
	Teaching & Research			
	Teaching & Scholarship			

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Provide data and comment on the proportion of staff remaining in post six, 12 and 18 months after return from maternity leave.

(v) Paternity, shared parental, adoption, and parental leave uptake

Provide data and comment on the uptake of these types of leave by gender and grade. Comment on what the department does to promote and encourage take-up of paternity leave and shared parental leave.

The University offers enhanced Paternity Pay and paid time to attend antenatal appointments as well as a range of activities to challenge the gendered nature of caring, including the following:

- Parental coaching for new fathers
- Newly developed PGR paternity policy
- Male-accessible baby-changing facilities
- Explicitly inviting male carers to focus group on childcare

- Partnering with Fathers Network Scotland on a National Work Life Week celebration
- Commissioning imagery of HWU fathers for family-friendly materials

The School strongly encourages new fathers to take paternity leave and 41 have done so between 2015 and 2019 (*Figure 31*). From 2017 onwards the number of staff taking paternity leave has increased significantly (*Table 32*). This increase could be down to better promotion of 'Family Friendly' policies within EPS and the University as a whole. During 2018 one academic member of staff took paternity adoption leave. We are fortunate to have some highly visible active fathers who act as role-models for others and under **Action C10** will continue to encourage male staff members to take full advantage of paternity leave opportunities.

Dr Michael Crichton – "Taking paternity leave (and being supported to do so by my employer) meant that I felt that I could establish a work-life balance and not miss a key time in my son's life. In particular, it helps to make clear to my family that they always come first. This alleviates a lot of stress at home and in turn allows me to perform better at work."

Figure 31 Dr Michael Crichton, Assistant Professor IMPEE and recent user of our paternity leave scheme.

Table 32 Paternity Leave uptake 2015 to 2019

Staff Category	2015	2016	2017	2018	2019
Research Only	[redacted]	[redacted]	6	3	[redacted]
Research & Teaching	[redacted]	[redacted]	8	10	[redacted]
Teaching & Scholarship		0	0	0	[redacted]
Professional & Support	0	0	0	[redacted]	[redacted]
Total	3	1	14	15	8

(vi) Flexible working

Provide information on the flexible working arrangements available.

Between 2015 and 2019, 20 formal requests for flexible working were made and all were approved (Table 33). Formal flexible working requests are uncommon in EPS, especially amongst T&R staff, but informal arrangements are often made with Line Managers, mostly to accommodate short term/minor changes in work pattern or unexpected changes in domestic circumstances, such as allowing staff to work from home to help with childcare issues.

In our 2018 survey, only 38% of our female academic staff agreed that our formal flexibility processes were fair and only 34% agreed that they were transparent. However, 82% of our female academic staff agreed that informal or temporary flexibility was available, an improvement over the corresponding figure in 2014 (76%).

Our updated flexible working policy better informs staff about the range of options available. New case studies and FAQs reinforce the benefits of flexible working for both staff and the business, and emphasises the potential to make informal arrangements. A training session for managers on how to support flexible working is currently being piloted by the University.

Table 33 Formal requests for flexible working (grey boxes indicate zero applications from either gender)

Staff Category		2015		2016		2017		2018		2019	
		F	M	F	M	F	M	F	M	F	M
Academic & Research	Requested										
	Approved										
Research Only	Requested										
	Approved										
Research & Teaching	Requested										
	Approved										
Teaching & Scholarship	Requested										
	Approved										
Professional & Support	Requested										
	Approved										
Total	Requested										
	Approved										

(vii) Transition from part-time back to full-time work after career breaks

Outline what policy and practice exists to support and enable staff who work part-time after a career break to transition back to full-time roles.

Across the University, it is typical for staff to utilise accrued annual leave to facilitate a phased return to work. The flexible working policy allows staff to reduce working hours formally and then to transition back to full-time working. In practice it is challenging for people to return to full time working should they wish to, due to redistribution of responsibilities and funds when they initially go part-time

When part-time flexible working agreements are established they are typically open-ended agreements, with no built-in review at an agreed point in time. Consequently workload and related salary costs are redistributed permanently rather than temporarily. A fundamental change of approach is required, with budgets managed to support this.

Action C8 will address this, where we will support people to return to work full-time within two years of their career break should they choose to do so by making better use of flexible working agreements, and planning cover and budgets accordingly.

The School has also supported candidates for external schemes aimed at returners from career breaks. For example, the School supported Dr. Mairi Haddow's successful application for a Daphne Jackson Fellowship (Figure 32).

Word Count: 1015

Mairi Haddow: "By providing prompt affirmation of a willingness to host me if my fellowship application were successful, and by providing access to funding to cover childcare while I wrote my proposal, EPS was instrumental in me returning to work after a five year career break. A mock interview and meeting Prof Steve McLaughlin and the head of ICS early in the process helped prepare me for my interview with the Daphne Jackson Trust and visualise where I would fit in the department."

Figure 32 Dr Mairi Haddow – Holder of a Daphne Jackson Trust Fellowship, supported by the School.

5.6. Organisation and culture

(i) Culture

Demonstrate how the department actively considers gender equality and inclusivity. Provide details of how the Athena SWAN Charter principles have been, and will continue to be, embedded into the culture and workings of the department.

Sustainable and steadfast culture change is at the heart of our approach for embedding the Charter principles. The SAT has been specifically configured by the School Management to allow both staff and students to raise any issues with the assurance their anonymity will be guaranteed. We already have an environment where women have an overt role in research and teaching leadership, but we need to communicate this better. Our staff surveys of 2014 and 2018 have shown us:

- a slight increase (60% to 63% for both female respondents and the general population) in the degree to which staff feel that they are consulted about key decisions
- a substantial increase (46% to 63%) (40% to 58% for females) in how they feel able to contribute.

but

- a drop (63% to 42% for both female respondents and the general population) in perception of how the School celebrates achievement
- a drop (50% to 40% for both female respondents and the general population) in perception of how clearly and effectively the School communicates

In order to address the communication challenge SAT will be the communications hub between the SMG and the staff and students of the School. A new publicity and communications role will be created and the role-holder will act as Manager for relevant actions. This is detailed in Action C1.

Data suggests there is a perception that we do not celebrate achievements enough. We will therefore ensure that Research Institutes within EPS address this issue at annual events. This is detailed in Action C12.

Teaching in some of our subjects is co-delivered at our campuses in Malaysia and Dubai with student cohorts of approximately equal size (to Edinburgh). The gender balance in these subjects amongst both staff and students is at least as good as the corresponding staff and student groups, so we feel able to move forward within the environmental constraints.

There is a clear need to embed EO&D into working practices across our Distance Learning provision and in our Dubai and Malaysia Campuses at a pace determined by the University's' strategic activities. This will be addressed by Action C13.

(ii) HR policies

Describe how the department monitors the consistency in application of HR policies for equality, dignity at work, bullying, harassment, grievance and disciplinary processes. Describe actions taken to address any identified

differences between policy and practice. Comment on how the department ensures staff with management responsibilities are kept informed and updated on HR polices.

New and updated University policies are communicated via staff newsletters and published online. New staff are directed to key policies during induction, and they are also flagged to new managers through a First 100 Days Toolkit. Training and awareness workshops are also available.

The School employs a dedicated HR Officer who acts as liaison between central HR and local managers and deals with all day-to-day enquiries. The School also has a named HR adviser supporting managers, and an HR Partner who advises SMG on procedural and strategic matters.

Within the School any issues that arise relating to HR policy are addressed as and when they arise by management, mediated, if necessary, by the School's HR Partner. Senior management have an open door policy and staff can raise any concerns at any time directly or with the HR partner.

The University has a positive attitude toward the promotion of equality and diversity alongside providing the underpinning rationale for activities across the University. This Equality and Diversity Policy directs both compliance and proactive activities that relate to equality and diversity across the University. Since 2017, new staff are directed to the Equality and Diversity policy when they sign their contract, and sign to say that they have read it and will adhere to it.

(iii) Representation of men and women on committees

Provide data for all department committees broken down by gender and staff type. Identify the most influential committees. Explain how potential committee members are identified and comment on any consideration given to gender equality in the selection of representatives and what the department is doing to address any gender imbalances. Comment on how the issue of 'committee overload' is addressed where there are small numbers of women or men.

The School's most influential committees, listed in Table 34, are populated by T&R and T&S staff, and we are gratified that the average female membership is somewhat above the average in the population as a whole which includes CRS and students (Table 1). However, a number of the committee roles are *ex officio* (e.g. Review Boards populated from SMG), so we do not believe that there is a problem of "committee overload" of female academic staff.

Table 34 Membership of main EPS committees

Committee	Remit	2014 % Female representation (number of women)	2018 % Female representation (number of women)
Senior Management Group	To manage and plan the activities of the School, making strategic and financial decisions.	20% ([redacted])	22% ([redacted])
Academic Review Boards	To consider cases for advancement, reward and promotion	Not recorded previously	39% ([redacted])
Probation Board	To monitor probationer progression and make decisions on completion.	25% ([redacted])	30% ([redacted])
Athena SWAN SAT	To plan and deliver activities in relation to EO&D	68% (13)	52% (11)
School Studies Committee	To manage the School's quality assurance, policy and resources in relation to the student experience.	32% (6)	33% (6)
Learning & Teaching Committee	To make strategic decisions and monitor provision of Teaching.	20% ([redacted])	36% ([redacted])
PGR Co-ordinators Group	To oversee the provision and monitoring of PGR Training.	25% ([redacted]	71% (5)
Staff Committees IB3 ICS IMPEE IPaQS ISSS	To organise, manage and deliver School's research.	Not recorded previously	IB3: 45% (21) ICS: 9% ([redacted]) IMPEE: 17% (10) IPaQS: 11% (8) ISSS: 17% (9)

(iv) Participation on influential external committees

How are staff encouraged to participate in other influential external committees and what procedures are in place to encourage women (or men if they are underrepresented) to participate in these committees?

The University openly advertises opportunities to serve on Senate and Court and the Head of School and line managers are proactive in encouraging women to apply, where appropriate to their career development. Professors Raffaella Ocone (IMPEE), Vicki Stone (IB3) and Gillian Thomson (DLT) and Ms Rachel Sutherland have all served recently. Dr Amanda Lyness (PS) currently serves on Court.

Participation in external (to the University) committees is supported and encouraged through PDR, although, in practice, is rarely in the gift of a line manager. Examples of female appointments external to the University include:

- Professor Mercedes Maroto-Valer - *President Environment, Sustainability and Energy Division - Royal Society Chemistry (RSC)*
- Professor Raffaella Ocone - *REF 2021 Engineering panel*

(v) Workload model

Describe any workload allocation model in place and what it includes. Comment on ways in which the model is monitored for gender bias and whether it is taken into account at appraisal/development review and in promotion criteria. Comment on the rotation of responsibilities and if staff consider the model to be transparent and fair.

There has been much discussion at School and University level on the matter of workloads since our Bronze submission 2015. The School is reluctant to introduce a very rigid allocation model as this can often have unintended consequences for individuals' ability to balance between proactive and reactive time. Nevertheless, for allocated work (direct teaching), we have a clear and mutually understood workload model and this is used when SPDs consult with HoRIs at the point of allocation for the Academic Year.

Workload balance is a matter of discussion at PDR, where individual profiles can be assessed by the HoRI as best meets their career needs. PDR considers teaching, research and "collegial" contributions, under which comes all administrative, leadership and management roles (including membership of the SAT). New staff and staff returning from a career break are supported via phased return, ***and we will strengthen our support for returning staff to renew their research activity under Action C8.***

Our staff survey tells us that only 55% (48% F/57% M) of staff agree that workload management is fair and only 46% (39% F/48% M) agree that it is transparent. Whilst stopping short of a completely rigid workload allocation model, ***a guideline for staff on how teaching workload is assessed, was introduced in January 2019, based on staff feedback about workload transparency. This is detailed by Action C7 and aligned to the recently published Institutional Workload Allocation Principles.***

(vi) Timing of departmental meetings and social gatherings

Describe the consideration given to those with caring responsibilities and part-time staff around the timing of departmental meetings and social gatherings.

The School holds its meetings between 10am and 4pm wherever possible, and participants are given sufficient notice to put necessary care arrangements in place. Any part-time arrangements are also considered, where necessary. Social gatherings are given the same consideration and we have, on occasion, combined the two (**Error! Reference source not found.Error! Reference source not found.**).

Some meetings involve staff from our Malaysia and Dubai Campuses. Due to the early or late timings required, meetings between Malaysia, Dubai and Edinburgh are arranged by consensus between the participants, who can call in from home if preferred.

Our 2018 survey indicated an 11% difference between women (55%) and men (66%) agreeing that meetings, seminars and social gatherings are arranged at times that make it possible for them to attend.

The staff survey shows that we need to improve communication and compliance amongst meeting organisers about core hours. Concrete actions will be "Leading by example", where Research Institute meetings, social events, and School wide meetings will always be between 10am and 4pm. This is detailed by Action C2.

Figure 33 In December 2019, IMPEE organised a conference at which RAs and PhD students presented specially-prepared videos of their research group. There was also a guest speaker (Dr Jamie Gallagher), pub quiz, lunch, coffee, cakes and a drinks/mince pie reception

(vii) Visibility of role models

Describe how the institution builds gender equality into organisation of events. Comment on the gender balance of speakers and chairpersons in seminars, workshops and other relevant activities. Comment on publicity materials, including the department's website and images used.

The School is committed to ensuring that women are visible in all spheres of our activity and has taken action to improve marketing materials, events and celebrations, as well as encouraging staff and students to participate in external campaigns (Figure 38 and *Figure 40*). Where possible we aim to reflect the cultural diversity of our community (Figure 39). In 2019, we commissioned a freelance photographer to help us build a "pen-portrait" library of images of female staff and students "in context", along with a few words about their role; some of these have been interspersed in this submission.

We also recognise the importance of our undergraduates as role models for our applicants and their junior peers (Figure 37). In our 2019 graduations, we observed that a high proportion of prize-winners were female, even in areas where women are severely under-represented (for example, all of the prize-winners in mechanical engineering were female). Also, winners of the School's first year PhD poster prizes were predominantly female. We have begun gathering data and have established a KIT approach for our high-performing female graduates, with a view to helping them form networks with our existing students.

We need to maintain this and continue to celebrate success of our students and consolidate and develop the KIT scheme. This is detailed in Action C12.

Other examples of female role-models include:

- Of the 6 School-nominated Honorary Graduates over the last four years, 4 of them have been female (66%) (Figure 36).
- The School hosts 100% (3) of the University's female Fellows of the Royal Society of Edinburgh (FRSE): Professors Ocone (also the University's only female Fellow of the Royal Academy of Engineering), Maroto-Valer and Stone (*Figure 40*).
- The PGRCG continues to hold an annual 'Christmas Lecture', one highlight over the last 4 years being the astrophysicist Dame Jocelyn Bell-Burnell who told the story of her discovery of the first radio pulsars whilst a postgraduate student.

Each Research Institute continues to run its regular seminar series. Over the last 3 years attendance has improved considerably, although the representation of women amongst our speakers is quite patchy, those in ISSS and IPaQS being quite low, Table 35.

We will undertake a review of our seminar programmes and take action to ensure that they are equally attractive to male and female PGR students and that they are seen as helpful in career development. This is detailed in Action C11.

Table 35 Seminar Speakers per Research

Institute	Year	M	F	% F
IB3	2015	46	19	29%
	2016	30	20	40%
	2017	34	28	45%
	2018	32	29	48%
	2019	33	19	37%
Chemistry	2015	14	5	26%
	2016	[redacted]	[redacted]	19%
	2017	[redacted]	[redacted]	14%
	2018	[redacted]	[redacted]	16%
	2019	11	9	45%
IPAQS	2015	19	6	24%
	2016	[redacted]	[redacted]	3%
	2017	26	5	16%
	2018	[redacted]	[redacted]	14%
	2019	[redacted]	[redacted]	14%
ISSS	2015	29	10	26%
	2016	32	5	14%
	2017	[redacted]	[redacted]	15%
	2018	34	9	21%
	2019	23	9	28%
IMPEE	2015	[redacted]	[redacted]	30%
	2016	[redacted]	[redacted]	17%
	2017	[redacted]	[redacted]	27%
	2018	[redacted]	[redacted]	20%
	2019	[redacted]	[redacted]	17%

Following our Bronze Award, we instigated a periodic survey of images representing the School in its print materials, its buildings, its webpages and its Twitter feeds. The results (Table 36 and Figure 34) show that little has changed between the two surveys, taken in 2016 and 2018, the proportion of male images remaining at about 70%. Although the representation of women in our images is proportionately better than that of females in the School, we believe that we should do better than this. ***We will take action to publish and update the survey findings so that those producing images are aware of how we look. We will also drill down into our image information to identify any areas where women are particularly under-represented. Action C5 will address this.***

Table 36 Webpage image statistics 2018-2020

EPS	Webpage		
	01/08/2018	*01/07/2019*	28/02/2020
Female	*140*	*80*	86
Male	*331*	*187*	158
Total	471	267	244
Female %	30%	30%	35%

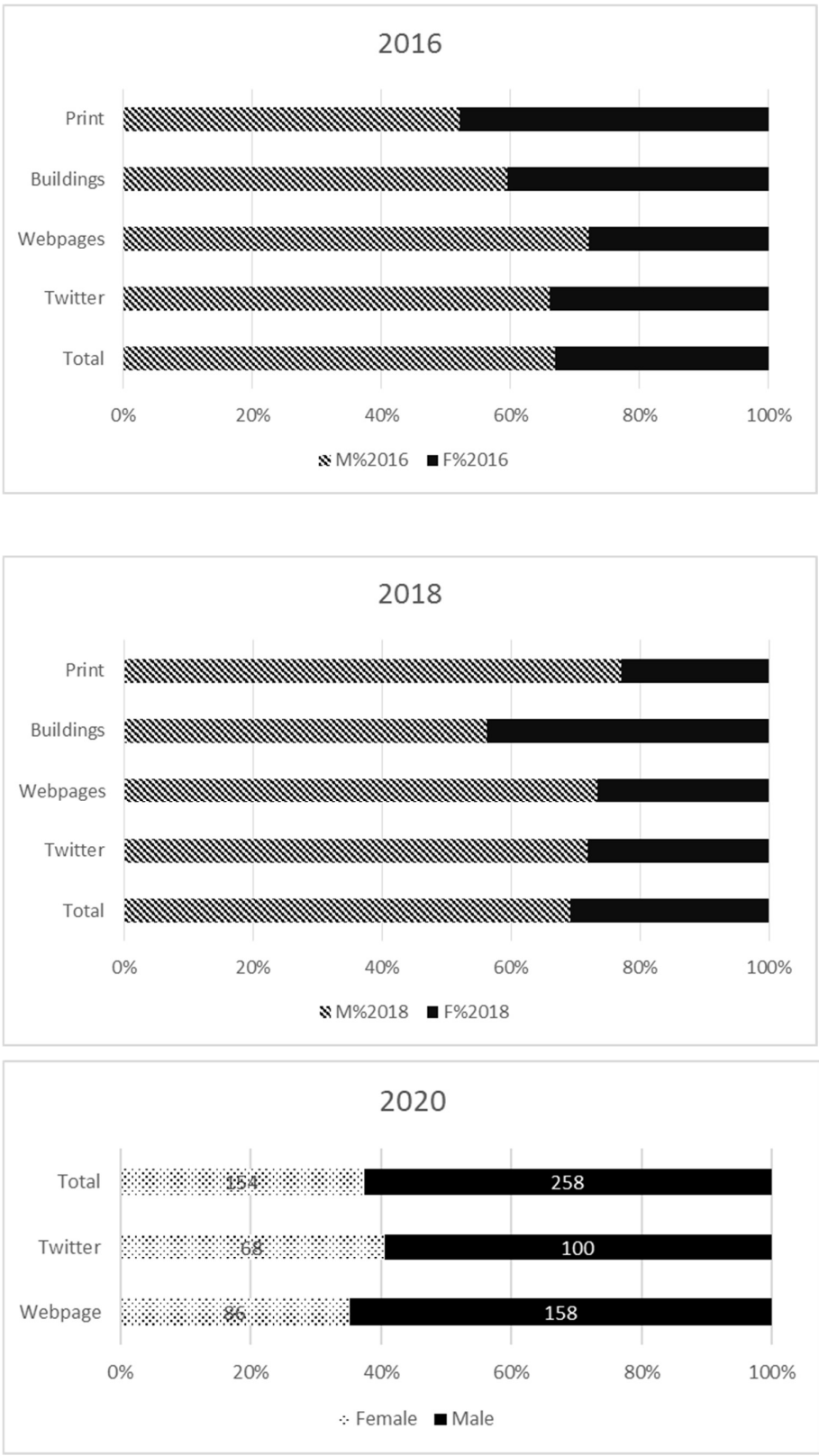

Figure 34 Comparison of female and male images across school, 2016 - 2020

Currently, we rely on 15 year-old images in much of our undergraduate recruitment material used for Open Days and have little in-house resource when preparing publicity material. As a result, the SAT has secured funding from the School to update and upgrade its image bank of female role models. ***We will approach female staff and students across our range of subjects all the way from those who represent academic leadership to our undergraduates and arrange a professional photo-shoot. Once our image bank is complete, we will establish a rolling plan to update it as staff and students progress. This is detailed in Action C5.***

Professor Gillian Thomson, Director of Learning and Teaching in EPS was appointed (in parallel) to an Assistant Deputy Principal role, reflecting her University-wide leadership in T&L. For many years, Gillian has been a role model for staff and students alike. For example, she has fostered our growing cohort of past and present Athena SWAN scholars.

EPS Athena SWAN 2019 Bursary Winners

Figure 35 Professor Gillian Thomson, Director of Learning and Teaching EPS and Assistant Deputy Principal

Figure 36 2017, Honorary Doctorate, Professor Anne Neville, OBE, FREng, FRS, one of IMechE's recognised 7 most influential mechanical engineers in 2016. She was not only able to address our graduating group of 70 chemical engineers, but was also personally introduced to 120 graduating mechanical engineers

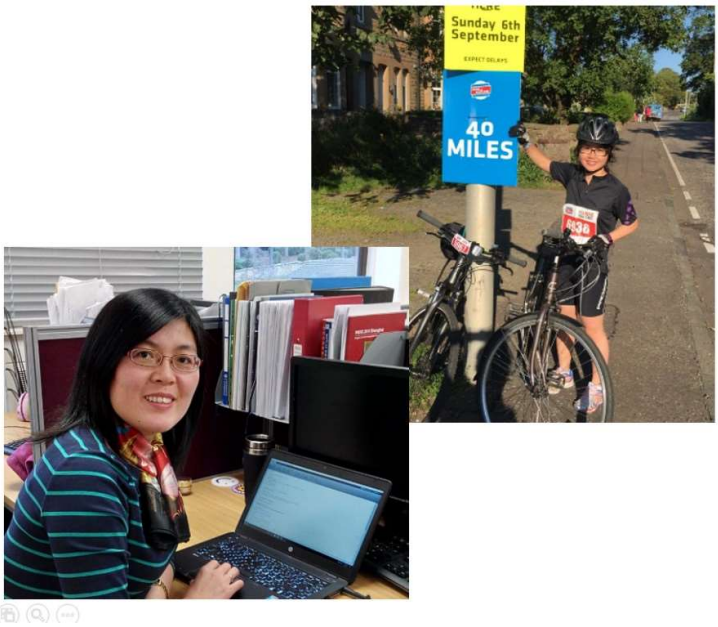

Figure 38 For 2017 Chinese New Year, the University invited colleagues to tell us about their work. CRW Jia Ni (wireless engineering) and Chunmei Zhang (nanophotonics) participated.

Figure 39 Since our 2015 application the School has formally joined WISE and WES, strengthening links with both. Women in Engineering events have been held annually since the launch of Women in Engineering Day in 2014. On the right is EPS WES representative, Professor Raffaella Ocone.

Figure 40 Two of the School's Fellows of the Royal Society of Edinburgh, Professor Mercedes Maroto-Valer (bottom row, left) and Professor Raffaella Ocone, OBE (bottom row, third from left) featured in RSE's Women in Science in Scotland mobile exhibition. Besides being displayed at Edinburgh Airport, the exhibition was also hosted at the University in Autumn 2019

(viii) Outreach activities

Provide data on the staff and students from the department involved in outreach and engagement activities by gender and grade. How is staff and student contribution to outreach and engagement activities formally recognised? Comment on the participant uptake of these activities by gender.

The School is proud of the wide range of public engagement activities in which members of its institutes and disciplines at all levels, from undergraduate students to senior professoriate, are involved (Figure 41 and Figure 42). In 2019, of the 110 events that EPS staff and students participated in 70 involved male staff/students and 40 involved female staff/students. The University coordinates its public engagement (@hwengage) through a dedicated manager and support officer (both female) and HWU was one of 12 universities across the country to receive a Strategic Support to Expedite Embedding Public Engagement with Research (SEE-PER) grant from Research Councils UK to enrich and embed cultures where excellent public engagement with research (PER) is more effectively and strategically supported.

Outreach activity is explicitly recognised as a collegial contribution in PDR. In our 2018 survey, 69% of female respondents and 57% of male respondents acknowledged this, compared with 56% of women and 35% of men in 2014.

Word count: 1840

Helen Bridle (Associate Professor, IB3) has recently won an EPSRC Engagement Champions awards to work with 3-7 year olds showcasing a range and diversity of engineering careers, including job roles, sectors, people and their backgrounds. She will be recruiting 20 engineers to participate including members of the EPS SAT. Dr Bridle will also be recruiting STEM ambassadors to support project delivery so UG, PGR and RA SAT members may also apply for those roles.

Figure 41 Dr Helen Bridle, Associate Professor IB3, former adviser to EPS SAT on maternity leave support and now member of University Athena SWAN Strategic Advisory Group.

[redacted]

In early 2020 the Watt Women in STEM Society from Heriot-Watt University organised and led four insight sessions in engineering and science for pupils at Currie primary school.

"Thank you so much to you and your friends for coming in today. We really appreciated it and the kids loved it! I think you inspired a lot of them to persue a path in engineering." [redacted]

Figure 42 Undergraduates from EPS, galvanised by our Athena SWAN Scholarship scheme, have formed their own network, under the aegis of Watt Women in STEM, which has a strong outreach element.

6. FURTHER INFORMATION

Recommended word count: Bronze: 500 words | Silver: 500 words

Please comment here on any other elements that are relevant to the application.

From the start of Covid-19 the priority of the University has been the health and wellbeing of its students, staff and their families. HWU management and the Trade Unions have met weekly, liaising constructively to develop the approach taken.

The University has implemented for students, the principle of "no academic detriment" ensuring students are not disadvantaged by the change in examination and assessment for the summer 2020 diet. For staff, the principle of "no detriment" is reflected in our "best endeavours" approach, with a clear understanding that many people are unable to deliver as normal, and a strong cultural emphasis on empathy and kindness (Figure 44).

Supporting activity includes (1) weekly meetings with Trade Unions, (2) a series of staff wellbeing "pulse surveys" (3) ensuring staff unable to work still receive full pay, (4) supporting people to access reasonable adjustments e.g. assistive technology/equipment (5) establishing an online community and weekly online drop-in for Parents and Carers, (6) increased support for victims of gender-based violence, and (7) highlighting existing support for mental health e.g. a dedicated counselling service, and developing additional support relating to Covid-19.

The School has adopted the University principles wholeheartedly has increased communication using Microsoft Teams with the Head of School leading regular open meetings to update staff on key issues. The School has proactively advised staff to ensure that they take regular breaks, actively use annual leave and to make use of communication channels to the Head of School should they feel workload and or other issues were proving difficult to balance during the lockdown. Line managers have been actively encouraged to accommodate issues for staff with child care challenges through a flexible approach to rearranging workload.

The principle of no detriment will be central to the transition out of lockdown. We will continue to support our community ensuring no detrimental impact based on protected characteristics. It is clear that the change in working practices during lockdown provides an opportunity to influence future working arrangements that promote greater inclusion and wellbeing.

December 2019: Dr Salek, as member of the organising committee, awarding prize for best video at the IMPEE Conference

Figure 43 Dr Karina Salek, Research Associate in IMPEE

Dr Karina Salek, Research Associate in IMPEE has been using colourful, patterned cotton to create eye-catching facemasks to donate to carers. Her contribution has been featured on Channel 5's News at Five and in the University's Newsletter https://www.hw.ac.uk/news/articles/2020/university-community-steps-up-covid-19.htm *from which the following quotation is taken.*

> *".. when I saw on the news that social workers and care homes are struggling .. I thought I could use my skills to do something useful. .. The situation we are all facing now due to the lockdown is hard on everyone, can cause sadness and depression. … by choosing bright and colourful patterns I could bring at least a little bit of joy to both patients and carers. Thanks to the University giving us the possibility to work from home I have a lot of flexibility finding time for academic and voluntary work"*

Word Count: 514

7. ACTION PLAN

The action plan should present prioritised actions to address the issues identified in this application.

Please present the action plan in the form of a table. For each action define an appropriate success/outcome measure, identify the person/position(s) responsible for the action, and timescales for completion.

The plan should cover current initiatives and your aspirations for the next four years. Actions, and their measures of success, should be Specific, Measurable, Achievable, Relevant and Time-bound (SMART).

See the awards handbook for an example template for an action plan.

Our Action Plan consists of three sections and is guided by our *Good Practice Check List*, *staff survey*, and *focus group consultations*. We have identified a number of key action points which are identified as **Priority Action** in the action plan table.

Action Ref.	Specific action	Rationale	Key outputs	Action holder	Time		Success criteria
Culture and Environment							
C1 Self-assessment process. Page 11.	Establish SAT as communications hub for School on EO&D matters.	Staff survey shows that communication within the school is perceived as inefficient.	Clearly articulated channels of communication, regularly reinforced.	SAT Chair and CPWG Co-ordinator.	May 20	Sep 22	Survey to confirm at least 80% of staff are aware of our Action Plan as measured in 2022 staff survey.
C2 Organisation and culture. Page 74.	**Priority Action.** Ensure core hours for school meetings are adhered to.	We recognise from our Good Practice Check List that a healthy work-life balance can be challenging to have, and need to address this.	Clear guidance agreed by SMG. Policy communicated to staff. HOS and HoRIs lead by example with no meetings outside core hours 10.00-16.00.	Head of School and Heads of Research Institutes.	May 20	Sep 22	Core hours implemented. Female staff report same work/life balance as male staff, as measured in 2022 staff survey.

Action Ref.	Specific action	Rationale	Key outputs	Action holder	Time		Success criteria
Culture and Environment							
C3 Organisation and culture. Page74.	Maintain and expand UG bursary scheme for female students.	Bursary scheme identified as good practice, and introduced in 2018, with positive feedback from participants.	At least 6 bursaries offered annually for summer research projects in addition to Research Institute bursaries.	SIWG co-ordinator.	Jun 20	Annual	Target of 1 PhD student recruited from each cohort of minimum 6 bursaries, as measured by annual audit.
C4 Numbers of UG students by gender. Page 18.	Institute support for UG year groups with less than 5 females.	Address the "lonely cohort effect". Lonely cohort effect is cited as a factor in likelihood of women not staying in STEM.	Where there are low numbers of women in subject areas the School will support networks and create a sense of community.	SIWG co-ordinator.	Sep 20	Sep 23	Survey among female UG to measure if sufficient support is provided for networking, with at least 80% satisfied.
C5 Visibility of role models. Page 79.	**Priority Action.** Increase visibility of internal and external female role models.	2015 audit of visibility of women in EPS showed low representation across the board, and 2018 audit shows little/no progress. Research has shown the positive impact of role models. We want to do more to celebrate role models across the School.	Library of electronic and printed material, increased number of female seminar speakers.	CPWG co-ordinator.	May 20	May 21	Permanent display of posters visible to UG and Open Days visitors. Equal representation of women and men in all channels (in buildings, online etc.) measured via final audit in 2021.

Action Ref.	Specific action	Rationale	Key outputs	Action holder	Time		Success criteria
Culture and Environment							
C6 Culture Pages 14,17.	Improve communication between SMG and Academic Staff.	Our recent staff survey showed a decrease in communication satisfaction levels.	- Bulletin between SMG and Research Institutes. - Dissemination of survey results.	SAT Chair and Head of School.	May 20	May 22	Quarterly bulleting provided by the SMG/ HoRIs and distributed to the Research Institutes. Staff survey demonstrates 20% increase in staff satisfaction with communications.
C7 Workload model Page 77.	**Priority Action.** Improve perception of fairness by increasing transparency of workload allocation.	Recent staff survey showed we need to improve the transparency of workload allocation. The survey showed a gendered perception of workload allocation with women feeling less satisfied than men that it was fair.	Guidance notes for line managers and reviewees prior to PDR.	SAT Chair	May 20	May 21	At least 10% increase in satisfaction from staff survey.

Action Ref.	Specific action	Rationale	Key outputs	Action holder	Time		Success criteria
Culture and Environment							
C8 Workload model Page 77.	Reinforce implementation of phased return and monitor for consistency across school.	Our records showed that we need to monitor workload for consistency, in order to provide a fair process across the school.	Guidance notes for HoRIs. Monitoring in place.	SAT Chair and HoRIs.	May 20	Annual	Guidance notes for HoRIs provided, compliance process in place and confirmed in annual report.
C9 Support for students Page 64	Provide platforms for forming UG and PGR female student networks.	Research has shown the positive impact of role models in creating a sense of belonging. We want to create a sense of community, and provide access to female role models.	Supporting regular social events and actively participating in WES programmes.	SIWG co-ordinator and SAT PGR co-ordinator.	May 20	May 23	Regular social events which includes all of EPS organised quarterly. Feedback from events demonstrates positive impact on female students in EPS.

Action Ref.	Specific action	Rationale	Key outputs	Action holder	Time		Success criteria
Culture and Environment							
C10 Flexible working and career breaks. Page 68, 70	**Priority Action.** To enable staff to maintain their career trajectory while on career break we will set up an Academic Returners Scheme to support research group while group leader is on career break.	Enable staff to maintain their career trajectory while on career break. Our survey data showed that while we had an increase in returners from career breaks some feedback showed that some staff had challenges. We want to improve the experience of staff relating to career breaks.	Staff taking parental leave will experience minimal career impact.	HoS and SAT Chair.	May 21	May 23	Funding in place to provide up to £10k for the academic. Interviews with staff returning from career break demonstrate (1) 100% are aware of the Academic Returners Scheme. (2) That these group leaders' careers benefit from the initiative.
C11 Seminars Page 79	**Priority Action.** Ensure the inclusion of female speakers in seminar program.	Our audit of seminar speaker gender shows that women are under-represented, with large fluctuations in rate of female speakers between the Research Institutes.	1. Seminar organisers promote a diverse range of speakers. 2. Increase in women role models.	HoRIs and seminar organisers.	May 20	May 21	Across all Research Institutes at least 25% of seminar speakers are women on an annual basis.

Action Ref.	Specific action	Rationale	Key outputs	Action holder	Time		Success criteria
Culture and Environment							
C12 Celebrating success Page 79	Hold an annual networking event to celebrate our Athena Swan achievements and promote women in STEM.	Staff survey and focus group discussions tell us we need to do better in celebrating our female students and staff, and their contribution to the School.	1. Hold annual networking event with invited high profile speakers. 2. Raised awareness of the success of our female students and staff.	HoRIs	May 21	May 24	1. Hold annual networking event. 2. Raised awareness of the success of our female students and staff. Survey to show at least 80% aware of highlighted success stories.
C13 Culture and environment Page 74	Roll out EO&D practices to include Dubai, Malaysia, and Distance Learning.	The school has a presence at each of our campuses and we want to make sure there is an impact from Athena Swan activities regardless of location.	EO&D practices and processes in place for each campus/sections where EPS is present.	HoDs	May 21	May 22	Processes in place for each campus/sections where EPS is present.

Action Ref.	Specific action	Rationale	Key outputs	Action holder	Time		Success criteria
Management and Organisation							
MO1 Self-assessment process Page 14.	**Priority Action.** Annual data gathering and analysis 1. Staff profile by gender and grade. 2. Job applications, offers and acceptances by gender and grade. 3. Staff turnover by gender and grade. 4. Staff promotions.	Review progression of new staff, impact of recruitment policies and School's staff support policies.	Numbers of staff by gender and grade for each staff category. Data reported back to SAT for analysis.	DAWG co-ordinator	May 20	May 24	Accurate data sets available and suitable for analysing trends.
MO2 Staff induction Page 52.	Ensure training for all probationary mentors.	Focus group discussions indicate that mentoring practices are not consistent across the school. There is a need for a formal and standardised approach to training for mentors.	1. Checklist 2. Improved quality of mentor reports to Review Board.	SAT Chair	May 20	Dec 20	All probation mentors have taken up training provided by the university, measured by annual audit.

Action Ref.	Specific action	Rationale	Key outputs	Action holder	Time		Success criteria
Management and Organisation							
MO3 Mentoring Page 40.	Overhaul mentoring processes for academics.	Staff survey indicates that women in some staff groups have not had their mentoring needs met. We want to change this.	Ensure training for all mentors.	CWG co-ordinator and HoRIs.	Nov 20	May 23	10% increase in satisfaction rate for mentoring, for both male and female staff, in 2023 staff survey.
MO4 Promotion Page 74	Implement promotion workshops.	Staff survey and focus groups indicate there is a lack of transparency regarding promotion processes and requirements.	Annual workshop ahead of promotion round for staff which includes female role models attending. Career development workshop.	HoRIs and Head of School.	Nov 20	Nov 23	10% increase in satisfaction rate for promotion processes in 2023 staff survey. At least one female academic promoted to senior level each year.
MO5 Promotion Page 54	Improve communication regarding University policy for promotion and career breaks.	We recognise from consultation with staff that staff on career breaks and part time are disadvantaged when it comes to promotion. We want to change this.	Targeted information about university's mitigating circumstances policy provided to relevant staff.	HoRIs	May 20	May 21	100% of part time staff and 100% of people having had a career break in last 3 years applying for promotion use the mitigating circumstances option, evidenced by annual data collection.

Action Ref.	Specific action	Rationale	Key outputs	Action holder	Time		Success criteria
Management and Organisation							
MO6 Flexible working and career breaks. Page 64	**Priority Action.** Provide the same standard UKRI level of parental leave and support for all PhD students.	There is no general policy for what parental leave is offered for PhD students. We want all students to be assured of the support they will receive when they become parents.	PhD students are well supported regardless of PhD funder during their parental leave.	HoS	May 20	May 21	Policy document which explicitly states the level of support for PhD students irrespective of funding source.
MO7 Academic leavers. Page 45.	Understanding reasons for leaving.	We do not have a coherent view of reasons for leaving in a disparate group. We wish to assess if there are any issues affecting particular groups of staff.	Review of leavers for past 5 years resulting in a clear picture of reasons for leaving by gender. Record of exit interviews.	HR and HoRIs	May 20	May 22	Record of exit interviews by gender. Reasons for leaving well understood.

Action Ref.	Specific action	Rationale	Key outputs	Action holder	Time		Success criteria
Management and Organisation							
MO8 Career development. Page 44.	Ensure that career development is part of the PDR process for CRS.	Focus group discussions indicate some CRS would like more guidance in their career development. PDR is the main mechanism for helping CRS in their career development.	Documented discussion taken place annually as part of PDR.	SAT chair and CRS line managers.	Jun 21	Jun 23	Documented annual PDR where career development is discussed. 90% of CRS PDRs include career development discussion as measured by annual audit of 10 random CRS PDR documents.
MO9 Induction. Page 54.	Overhaul induction process to make it more welcoming.	Our staff survey suggested that while we have in place a local induction there is a need to make it more welcoming.	A more personalised induction process, with checklist of "how to get started". Support from mentor.	HoRIs	Sep 20	Sep 22	Significant improvement (with a target of 20% increase) in staff's perception of induction processes, measured in 2022 annual survey.

Action Ref.	Specific action	Rationale	Key outputs	Action holder	Time		Success criteria
Management and Organisation							
MO10 Career development. Page 53.	**Priority Action.** Maintain activity in the Aurora leadership program for women.	Staff data show a clear need to support women in reaching senior leadership roles.	Two staff members supported for the Aurora program annually.	HOS and HoRIs	Sep 20	Sep 23	Two staff members supported for the Aurora program annually.
Processes							
P1 Staff recruitment. Page 36	Use international network of collaborators for personally contacting potential female applicants for academic positions.	Number of applications from women is low. To ensure we recruit the best, we will utilise our networks to attract a more diverse set of candidates.	Increased rate of female applicants for academic positions.	HoRIs and institute colleagues.	Oct 20	Oct 23	Achieve at least 30% of applications from women, measured annually by 2021-2023 audits.

Action Ref.	Specific action	Rationale	Key outputs	Action holder	Time		Success criteria
Processes							
P2 Staff recruitment. Page 36	**Priority Action.** Ensure that all interview panels have an appropriate gender balance and that all panel members have done training in unconscious bias.	We have been steadily increasing female headcount over the last 4 years. However, data suggests there are some issues arising in shortlisting and appointment that require attention for some specific staff groups, such as CRS, so that we can maximise hiring potential.	Coherent shortlisting and interview processes across the school.	HoRIs and interview panel members.	Oct 20	May 24	90% of recent staff recruits report a female panel member measured via staff survey. 90% of all panellists undertaken unconscious bias training, measured by audit.
P3 UG recruitment. Page 21	**Priority Action.** Ensure female representation and role models present at open days and recruitment fairs.	Our data show that some of our subject areas have below national average numbers of women taking up UG study with us. We want to meet the national average and our Scottish Government 75:25 target in reducing gender imbalance in some subject areas.	Annual increments towards target of 25% UG females by 2030.	Heads of Disciplines	Jan 21	May 30	At least 25% UG females in all subject areas by 2030. Female representation at open days and recruitment fairs is at least representative of the school gender profile.

Action Ref.	Specific action	Rationale	Key outputs	Action holder	Time		Success criteria
Processes							
P4 UG attainment Page 24	**Priority Action.** Where there are low numbers of women in subject areas the School is looking to support networks and create a sense of community across the School.	Feedback from student body suggests that there is a problem with "lonely cohorts".	Offer opportunities for female UGs to work across discipline boundaries.	SAT UG liaison	May 20	May 22	Offer opportunities for female UGs to work across discipline boundaries. Survey among female UG to show at least 80% satisfaction rate for community efforts.
P5 PGT recruitment Page 28	Find reason for decline in % females in PGT EECE (Figure 21) and provide targeted recruitment effort.	While our numbers of women studying PGT courses have been increasing we still have some areas where we have seen a decline in numbers.	Consultation identifies issue(s) which are addressed. Increase in percentage of students studying PGT EECE who are female.	SAT UG liaison	Oct 20	Oct 21	10% increase in percentage of females in PGT EECE.

Action Ref.	Specific action	Rationale	Key outputs	Action holder	Time		Success criteria
Processes							
P6 PGR recruitment Page 34	Harmonise EO&D practices across PGR, including CDTs.	Centres for Doctoral Training have EO&D policies in place. While there is some autonomy in admissions we want to make sure EO&D is consistent across the School.	Common EO&D policy document for PGR matters.	SAT PGR liaison	Oct 20	Oct 21	Common PGR EO&D policy document across EPS.
P7 PGR recruitment Page 35	Introduce scheme for part-time PGR study.	We have low numbers of PT PGR students. We can see a slight preference toward PT arrangements for women and want to increase flexibility in order to increase the number of women taking up PGR opportunities.	Increase percentage of female PGR students.	SAT PGR liaison	May 20	May 23	Target of a 20% increase of female PGR students across all EPS disciplines.

Action Ref.	Specific action	Rationale	Key outputs	Action holder	Time		Success criteria
Processes							
P8 Support for grant applications. Page 65	**Priority Action.** Offer mentoring support for grant writing.	Data shows that female staff members are less successful in winning grants. Whilst we cannot influence gender bias in external systems we can optimise likelihood of success internally.	Provide support from senior academics in writing grants. Provide female academics dedicated time for grant writing.	HoRIs	May 20	May 23	Increase success rate among women by an average of 4% to be on par with male staff.